

**INK2S00113\_CLN5\_W26X\_A08\_BB**  
 28,484 bp

5'

TTTTTTTTTTTTTTTTAAAGCTGTTCTCTGCTGATTGCTTTTTAAAGCTAGGCTCAAGTGTGGGGCCACGGAATCCTTCAGGTGCCCT  
-----  
AAAAAAAAAAAAAAAAATTTGACAAGGACGACTAACGAAAAATTCGATCCGAGTTCACACCCCGGTGCCTTAGGAAGTCCACGGGA

85

CLN5 >

TCAAATCAGACATTACATTTTCAGCTCTCAGGGCTAGAATGCTTCCCCCTCTTATCTTGGGCAGGTCTTTGAAGAAGCCAGTTTAG  
-----  
AGTTTAGTCTGTAATGTAAAGTCGAGAGTCCCGATCTTACGAAGGGGGAGAATAGAACCCTCCAGAAACTTCTTCGGTCAAATC

170

CLN5 >

CCTTGGTAATTTTGAATTTGGCCATAGTATACGGAGGAGAGCTAGGTAGCTATCAAAACGCTTAGACAAACGTATGGTAAAATGC  
-----  
GGAACCATTAATAACTTAAACCGGTATCATATGCCTCCTCTCGATCCATCGATAGTTTTGCGAATCTGTTTGCATACCATTTTACG

255

CLN5 >

AGCCAGCCTGAACCTCCGCAAAACCCCAACCTGGAGCAGCAAGTGGGCAAAGGAGTGTGTGTTTGGGGCAGGGTACTGAGTC  
-----  
TCGGGTCGGACTTGGAGGCCTTTTGGGGGTTTGGACCTCGTCGTTACCCGTTTCTCACACACAAACCCCGTCCCATGACTCAG

340

CLN5 >

CCATATGTAATCAAGAGACCTGGAGGGCCCAAGGAAGTCAGTGACACCCCAAGCTACATATCCTCCAATGGATTGTGGTGGT  
-----  
GGTATACATTAGTTTCTCTGGACCTCCCGGGTTCTTTCAGTCACTGTGGGGGTGTTTCGATGTATAGGAGGTTACCTAACACCACCA

425

CLN5 >

CATCTCCGGCTACCGAAGCCACCTTGCTTATTCATAGGCTTACAAACATTATGATGCTTCACACGAGTTGTGGGTGAAGTGAA  
-----  
GTAGAGGCCGATGGCTTCGGTGGAACGAATAAGGGTATCCGAATGTTTGAATACTACGAAGTGTGCTCAACACCCACTTCACTT

510

CLN5 >

GGAATTGGAAAGTCCCGGTCTAAGGCCCTGCAAAACTGCTGTCTGGTAAAAACAAGTGAATGACTATGGCAAGGCCCTGAATGACTAC  
-----  
CCTTAACCTTTTCAGGGCCAGATTCCGGGACGTTTTGACGACAGACCATTTTTGTTCACTGATACCGTTCCGGGACTTACATGATG

595

CLN5 >

GTATAGACTTAAGTCAGTATTTGTGCCTAACAGCAAAGCATGCCACAAGAGGCTCCTCAAAAGCCGGGTAATTGATGCCATTGTT  
-----  
CATATCTGAATTCAGTCATAAACACGGATTGTGCTTTTCGTACGGTGTCTCCGAGGAGTTTTTCGGCCATTAACACTACGGTAACAA

680

CLN5 >

TTCTTGACCTAGTTGAAGAGTCAAAGAAGAGAAGGTGATGCAGAACTTCTTTCCAGTGAAGTGACAGATCCAAGCAAGGAACAC  
-----  
AAGAACTGGATCAACTTCTCAGTTTTCTTCTTCCACTACGTTCTTGAAGAAAGGTCACTTCACTGTCTAGGTTTCGTTCTTTGTG

765

CLN5 >

CTGCCTGTGAGGGGAGCGGTAGGGGAGGGGGTAGATTCGGCAGCACTCGGGTAGTGGCAGGGACCACATATTGTCGGTGTAAACC  
-----  
GACGGACACTCCCTTCGCCATCCCTCCCCCATCTAAGCCGTCGTGAGCCCATCACCGTCCCTGGTGTATAACAGCCACAATTGG

850

CLN5 >

ACTGTTATCACTGGCCCAGGTTCGAGTGAGGACGAGTCATTTCCCACTAAGCACTTGGGGAGTGGCAGGGACCACATATTGTCAG  
-----  
TGACAATAGTGACCGGGTCCAGCTCACTCCTGCTCAGTAAAGGGGTGATTCGTGAACCCCTCACCGTCCCTGGTGTATAACAGTC

935

CLN5 >

TGTTAACCCTGTTATGACTGGCCCAGGTTCGGGTGACGACGAGCCATTTCCGCACTATTGTCCCTTCTTCTCACTGCACCCCA  
-----  
ACAATTGGTGACAATACTGACCGGGTCCAGCCCACTGCTGCTCGGTAAAGGCGTGATAACAGGGGAAGAAGGAGTGACGTGGGGGT

1020

CLN5 >

GCCCTGCACCCTCAGCTCCAAATACACATTTCTCGTTCACTCAACGTTTGTGACACCTAGCGTGGGCCCTGTGGGATGGGGTAAA  
-----  
CGGGACGTGGGAGTCGAGGTTTATGTGTAAGAGCAAGTGAGTTGCAAACTGTGGATCGCACCCGGGACACCCTACCCCATTT

1105

CLN5 >

3'

AGTTCCGGTGTGGGAGGAGCCCCGGTGACAGATTTTTGGTGGTGGTGGCTTTGGGCAAGGACAGGTCAATTCATAAAAAGAT  
TCAAGCCACAACCCCTCCTCGGGGCCACTGTCTAAAAACCAAACCACCACCGAAAACCCGTTCTGTCCAGTTAAGTATTTTCTA

1190

CLN5

Sanger Sequencing

GACCAAAGCACCTTCCTGGA

PCR Forward

GACCAAAGCACCTTCCTGGA

GACGCCCCAGGTCTGGATCGAATTCTCCTGGGAGCCAGACCAAAGCACCTTCCTGGACTGCAAAGTGTGGAAGCCGCCGCGGGCC  
CTGCGGGGTCCAGACCTAGCTTAAGAGGACCCTCGGTCTGGTTTCGTGGAAGGACCTGACGTTTACACACCTTCGGCGGCGCCCGG

1275

CLN5

GGGCGCGGGGAGGTGTCATGCGCCGGAACCTGCGCTTGGGGCCAAGCTCTGGAGCTGACGCGCAGGGGCAAGGCGCCCCGCGTCC  
CCC GCGCCCCCTCCACAGTACGCGGCCTTGGACGCGAACCCCG6TTCGAGACCTCGACTGCGCGTCCCCGTTCCGCGGGGCGCAGG

1360

CLN5

CGGACTGGCGGCTCCGCGCATGCTCCTCCCACCGGCGTCGCA6GCCTCGAGAGGCTCCGGAAGTACTGGGTGCAGCCTGATGGCG  
GCCTGACCGCCGAGGCGCGTACGAGGAGGGTGGCCGCGAGCGTCCGGAGCTCTCCGAGGCCTTCATGACCCACGTCGGACTACCGC

1445

CLN5

CLN5-201

1  
M A  
ENSE0...  
CLN5-201

gRNA Protospacer

GGGACGCGCTTCCTGGTGCT

Donor Template WT -> SNV

GGGCGGGGCGCGGCTCGGGGACGCGCTTCCTG<sup>A</sup>TGCTGGGCCCTGG

CAGGAGGTAGACACGGCACAGGGCGCCGAGATGCGGGCGGGGCGGGGCGCGGCTCGGGGACGCGCTTCCTG<sup>G</sup>TGCTGGGCCCTGG  
GTCTCCATCTGTGCCGTGTCCC GCGGCTCTACGCCGCCCGCGCCGCGCCGAGCCCTGCGCGAAGGAC<sup>C</sup>ACGACCCGGGACC

1530

CLN5

CLN5-201

Q E V D T A Q G A E M R R G A G A R G R A S W C W A L

ENSE0003712901

CLN5-201

Donor Template WT -> SNV

Protospacer Sequence

PAM

SNV

Donor Template WT -> SNV

CGCTGCTTTGGCTCGCGGT

CGCTGCTTTGGCTCGCGGTGGTTCCGGGCTGGTCCCGGGTCTCGGGCATCCCCTCCC GCGCCACTGGCCGGTGCCTACAAGTG  
GCGACGAAACCGAGCGCCACCAAGGCCCGACCAAGGCCCAGAGGGCCAGA6CCCGTAGGGGAGGGCCGCGGTGACCGGCCACGGGATGTTAC

1615

CLN5

CLN5-201

A L L W L A V V P G W S R V S G I P S R R H W P V P Y K

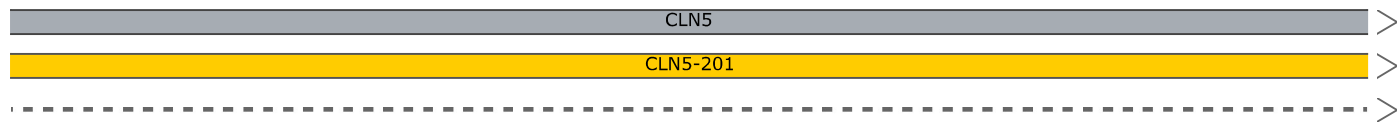
ENSE0003712901

CLN5-201

Donor Template WT -> SNV

AGTGC GGC GGC GCG CGC GCA CTG TCG GGG GTT GGG GTC GGC GTT GAC GAT GGG GGG AT GGG GTG CT GGG GCG GGG GAC CCCT GCT CAC CG  
TCAC GCG CGC GCG CGC GTG ACAG CCCC AAC CCC AGCC GCA ACT GCT ACC CCCT ACC CCAC GAC CC CGCC CT GGG GAC GAG TG GC

1700

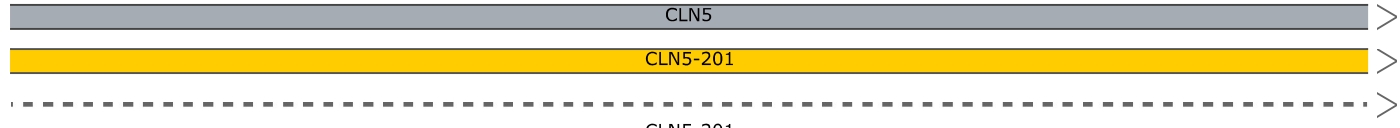


CLN5-201



TGG TTT GTG TCG GGT CAC GAG ATGG TGC GGG GAC AGC GCC GGG TGAC GCT CCG GAG CGC ACTT GAG AGC AAAG TTG AGG ACT GGG G  
ACCAA ACAC AGCC CAG TGCT CTACC AC GCG CCCT GTCG CGG CCA CTG CGAG CCTCG CGT GAA CTCT CGTTT CAACT CCTG ACC CC

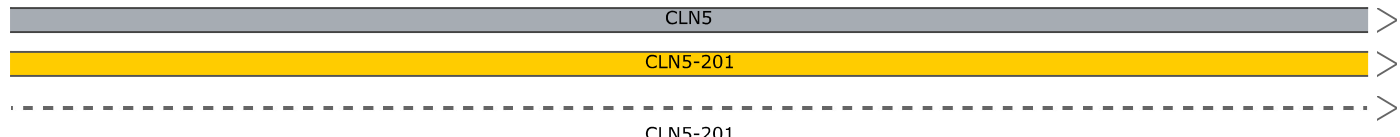
1785



CLN5-201

AGT CGC AGC CGCT CGTTAC GTGC AGCCCT GGG ACCTTTC GTCC CCTCTGG TCACTT GCG GCAG ACTCAG GACAG TCCTGA ATCGT  
TCAG CGTC GGG CAG CAATGC ACGT CCGG ACCCTGG AAAAGC AGGG GAG ACCAGT GAA CGCCGTCTG AGTCCTGT CAGG ACTTAG CA

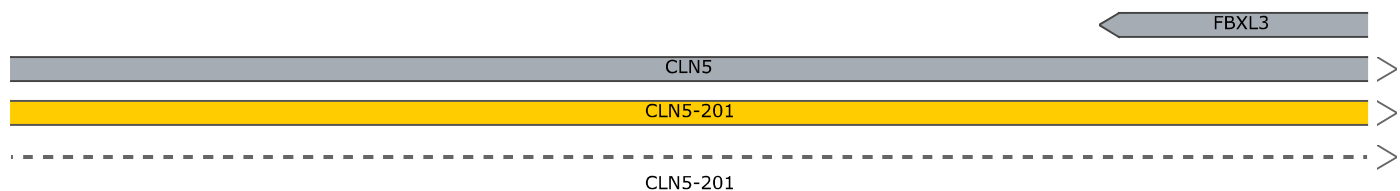
1870



CLN5-201

GGAAGAAGAAAAGGAGAGTAATGTTATTTAATGGAGGGACTTCTGGGTACAAGTAGCTGATTTCTTGAGTAGTTTTAAAAACACTG  
CCTTCTTCTTTTCTCTCATTACAATAAATTACCTCCCTGAAGACCCATGTTTCATCGACTAAAGA ACTCATCAAATTTTTGTGAC

1955

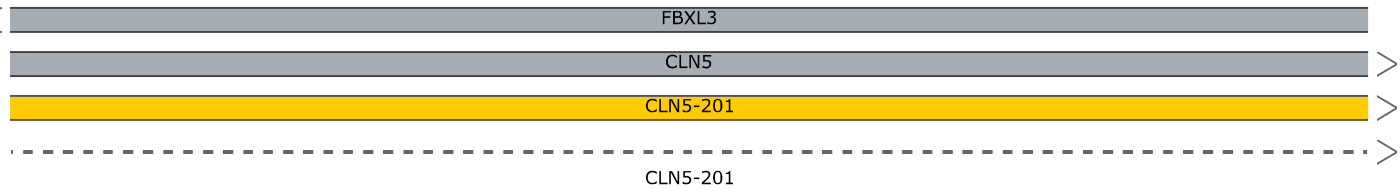


FBXL3

CLN5-201

TCTATCGCATTTATTTATATCATGCACTGTCGTTAGTTATTACCGCGGAACATTTGGTACAATTTACTGGGCGACCAACTCGCTC  
AGATAGCGTAAATAAATATAGTACGTGACAGCAATCAATAATGGCGCCTTGTA AACCATGTTAAATGACCCGCTGGTTGAGCGAG

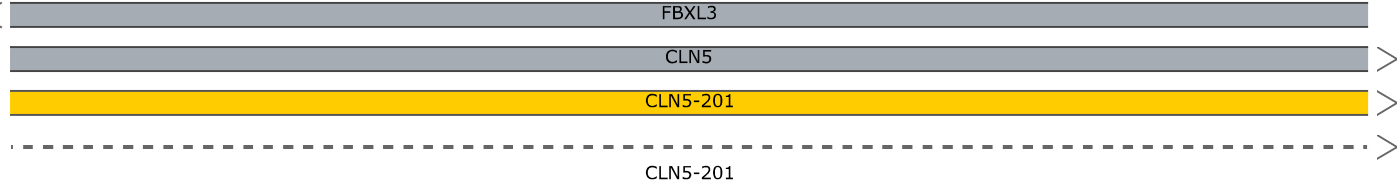
2040



CLN5-201

TGG TTT GAA CCG ATC AGA ACCTG ATCCG AAGTCC TTATT GGG ACTTCCC AGTTTTT GCCCTCAA AAAGT CCG CGCATCCC GGG GAATC  
ACCAA ACTTGG ACTAGTCTTGG ACTAGGCTTCAG GAATAAC CCTGA AGGGTCAA AACG GGAGTTTT CAG CGCGTAG GGCCTTAG

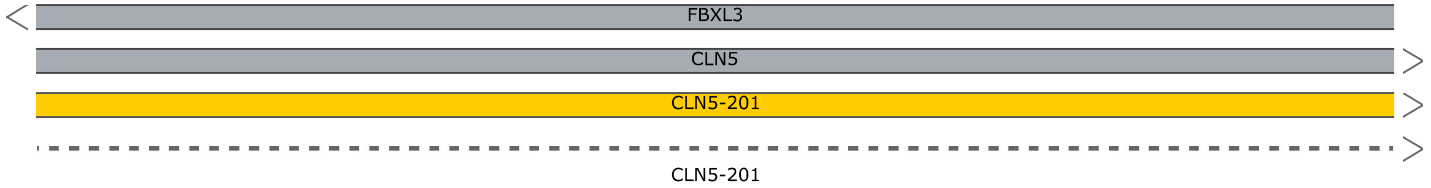
2125



CLN5-201

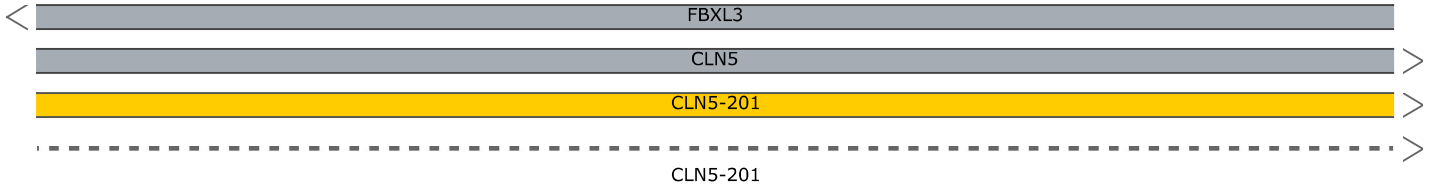
CCCGTCTCCTGCAAGTCCTGGTTAGACCGGGAAGATTGTCACCGCTTTTGTCCAGTCTTCAGCCTGGAGGTAGGACGCCGGTCTCTA  
GGGCAGAGGACGTCAGGACCAATCTGGCCCTTCTAACAGTGGCGAAAAACAGGTCAGAAGTCGGACCTCCATCTCTGCGGCCAGGAT

2210



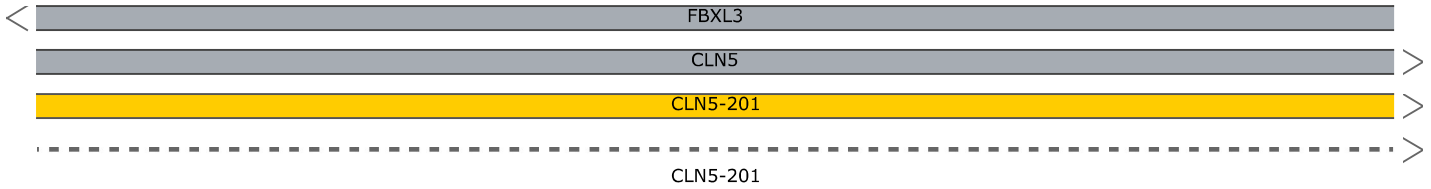
AGTCGGGGACAGAGCCCCGCACACCTGGGAGGTTCGATTCCAGCCTTTGACAGAGAAGACACAGCCTCCGGCGGTTCAGAGATAGCTA  
TCAGCCCCTGTCTCGGGCGTGTGGACCCTCCAGCTAAGGTCGGAAACTGTCTCTTCTGTGTTCGGAGGCCGCCAGTCTCTATCGAT

2295



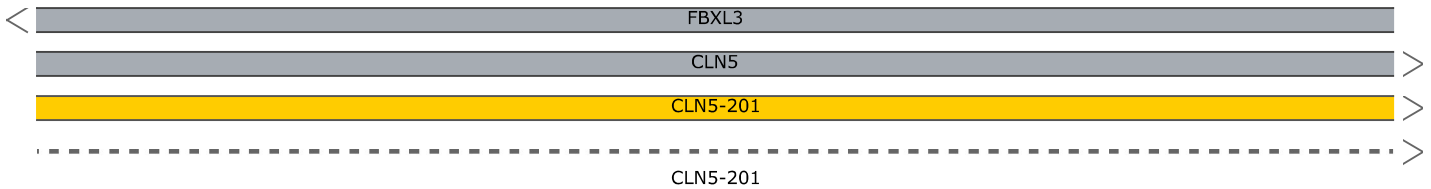
AACACAGAGAAAAGAAAACATGGTGTCAACATCAGGCAGGAGAAAAGACCAGCAGTTTTTTGAAAACAGCTATTTTTCTTTAAACCAA  
TTGTGTCTCTTTCTTTTGTACCACAGTTGTAGTCCGTCCTCTTTCTGGTCGTCAAAAACTTTTTGTTCGATAAAAAAGAAATTTGGTT

2380



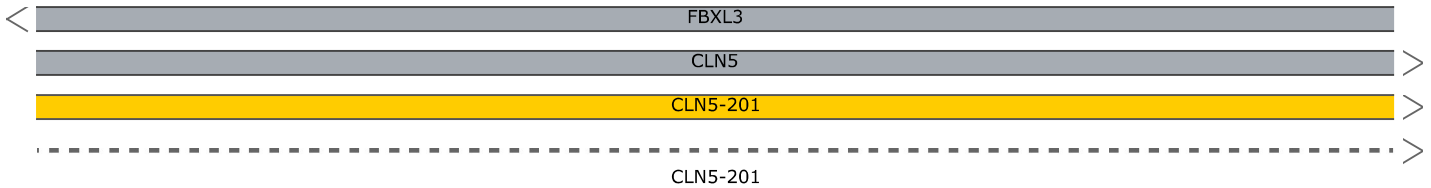
AAGCATCATTGGACATAATTTTAACTTACTAGCATAAGTAATCAACAGCTAAAACCTGCACACAACAAACCTGAAAAAACAGCTA  
TTCGTAGTAACCTGTATTAAAATTGAATGATCGTATTTCATTGTCGATTTTGACGTGTGTTGTTTGGACTTTTTTTGTTCGAT

2465



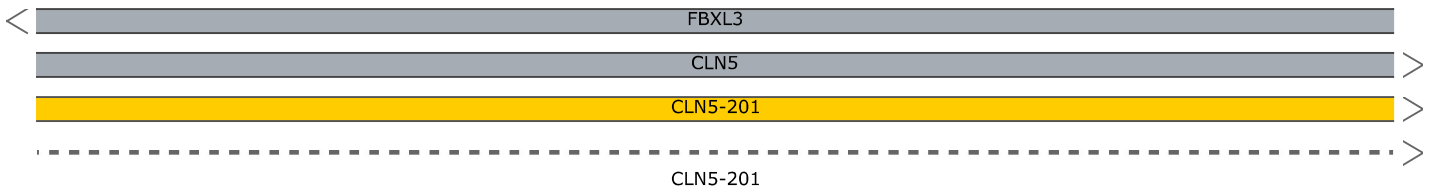
TTTTGTATGACAGTATGAGTGGGAAGGAGTTCTGCCTGCTGCGGGTCAAATCTGGCTCTGTCATCACCAGGGATCTTGGGAAAAGT  
AAAACTACTGTCTACTCACCCTTCTCAAGACGGACGACGCCAGTTTAGACCGAGACAGTAGTGGTCCCTAGAACCCCTTTCA

2550



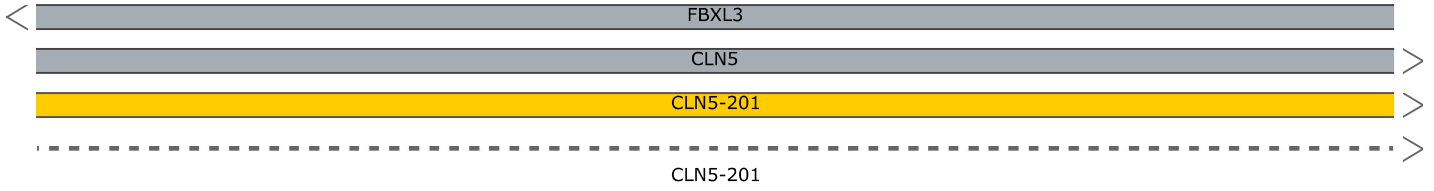
TACTCAGAACTCTGTGCCACATGCCCTGAGTCAAAAAATAGGAATAGTGGTAGCACGTACCTCATAGGTTTGTCTGGAAGGATT  
ATGAGTCTTAGAGACACGGGTGTACGGGACTCAGTTTTTTATCCTTATCACCATCGTGCATGGAGTATCCAACGACCTTCTCTAA

2635



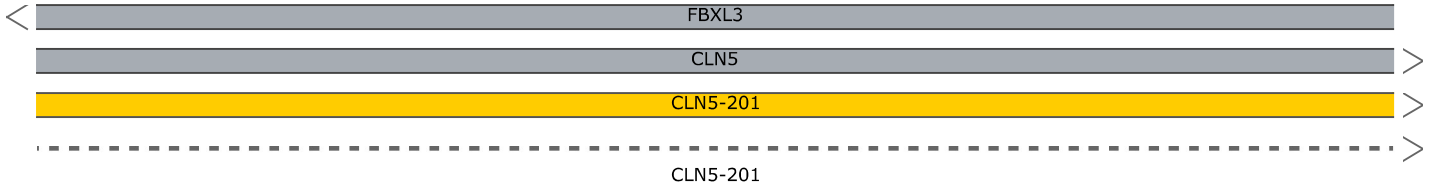
AAATCTAGTAAAATGCCAGCTGTTGTCAAACCTAGATAGTGTATTCTGCTCACTGAAATGTTTACAACACTTTTTTGTGTTTGTGT  
TTTAGATCATTTTACGGTTCGACAACAGTTTGGATCTATCACATAAGACGAGTGACTTTACAAATGTTGTGAAAAAACAAAAACACA

2720



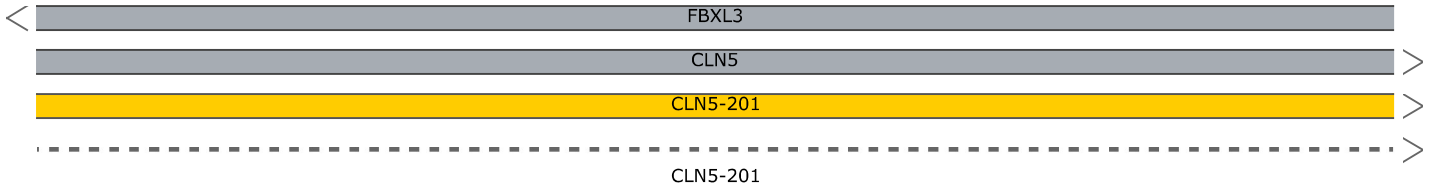
GATATACTACGTGGAAAGAGAAGTTTGTGGTTGAAGCTAGTTTTCTGGAAAATGTTAATAATAAAATGTTTGTAAAGAAGTCAAAA  
CTATATGATGCACCTTTCTCTTCAAACACCAACTTCGATCAAAAGACCTTTTACAATTATTATTTTACAAACATTCTTCAGTTTT

2805



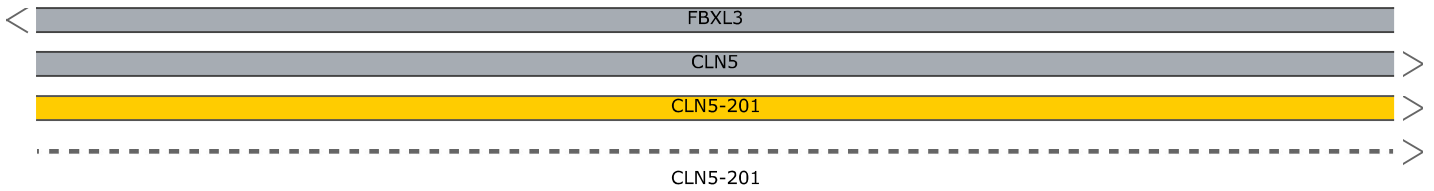
TTACTCAATAGAACAAGAATTGTAAATCCAAACGATTTGATTTAACATTAGGGCAAGGTGTTGACTATGGCTTTTTAGTGGATTT  
AATGAGTTATCTTGTTCTTAACATTTAGGTTTGCTAAACTAAATGTAATCCCGTTCCACAACCTGATACCGAAAAATCACCTAAA

2890



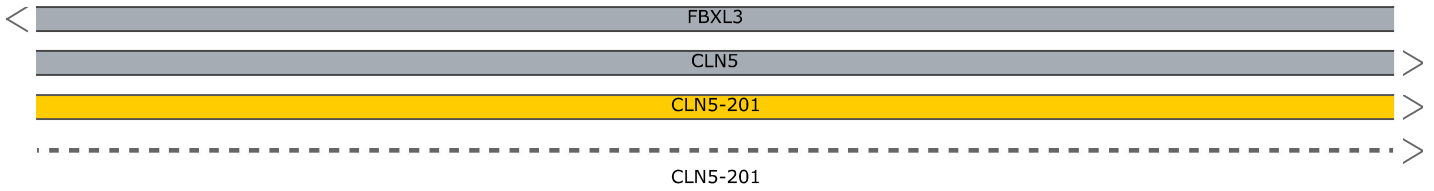
TTTTTTTAAGTCTCAGATATTAAGTACGTGCTCCCATCTAATTCCTCAATTGAATATAATATTTAAGTTTATTAAGTTCACACT  
AAAAAAATTCAGAGTCTATAATTCATGCACGAGGGTAGATTAAGGGAGTTAACTTATATTATAAATTCAAATAATTCAAGTGTGA

2975



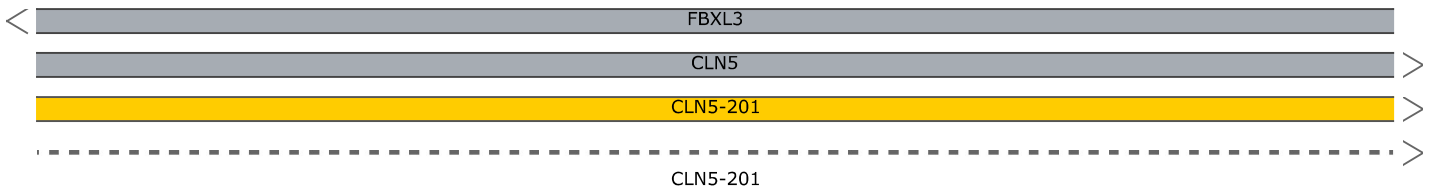
TAAATTACCTTTGAACTAAAATAGATTTTGTGCTGTCAGTGAAATCTCCATGTGATTATGTATTTGTTTAAACCAGGTAAGTGCC  
ATTTAATGGAAACTTGATTTTATCTAAAACGACACAGTCACTTTAGAGGTACACTAATACATAAAACAAATTTGGTCCATTACCGG

3060



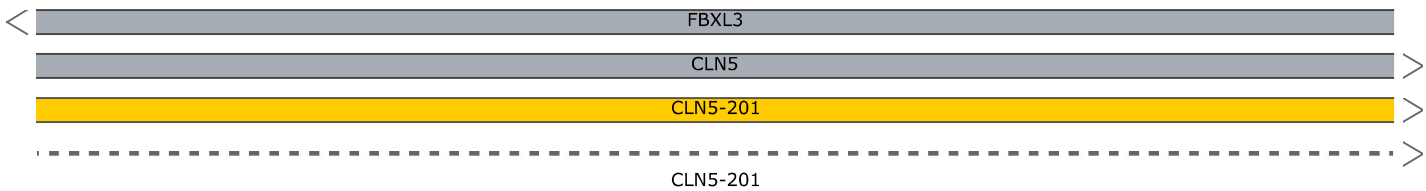
TATAAAACACTGTACCCAAGTAGCAGAAACTTTTGGGAGCGTCGTTAATAGTTTCGATTAGCATAAAGATTTTAACTTCTTAAGT  
ATATTTTGTGACATGGGTTTCATCGTCTTTGAAAACCTTCGCAGCAATTATCAAAGCTAATCGTATTTCTAAAATTGAAGAATTCA

3145



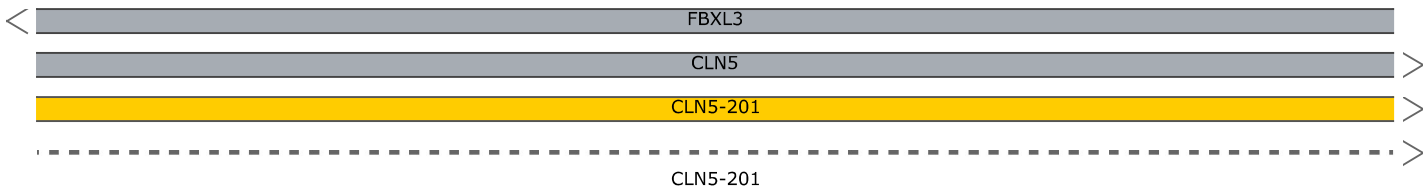
TAAAATAGAAATTTTTGTTGATTTGTTAAGATTTGTTAGATCTGGCTACAACCTTGGGGATCTAGGATTCTTAGATAGAAGCTGT  
ATTTTATCTTTAAAAACAACCTAAACAATTCTAAACAATCTAGACCGATGTTGGAACCCCTAGATCCTAAGAATCTATCTTCGACA

3230



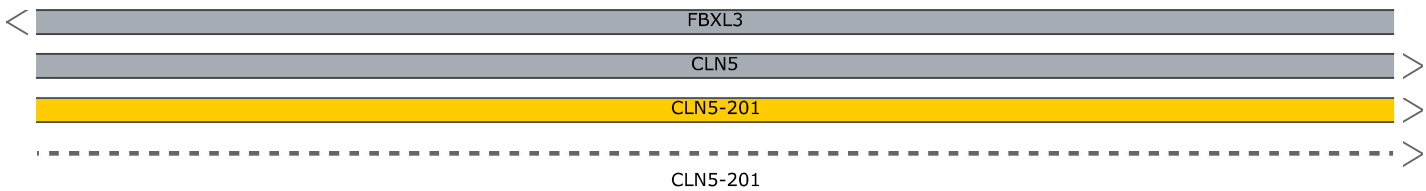
TGTCGCCACCACTTCTTTCTTTCCAGTGCCAGATTATAGGTGACCAGTGTGTCTGTTGAGCTGAATTCAGCTGCAGTGCCCTC  
ACAGCGGTGGTGAAGAAAGAAAGGGTCACGGTCTAATATCCACTGGTACACAGACAACCTCGACTTAAGTCGACGTCACGGGGAG

3315



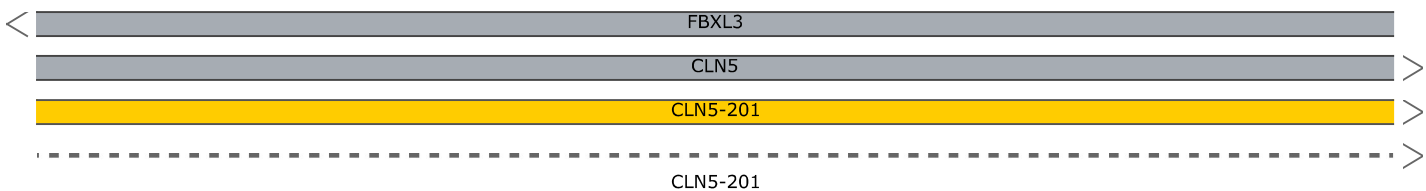
GAGTCCTATTGCTGTGGCCTTCTCCGGTCTTCTTTCTTGCCTGCATTGTTGAGGTCACCTTCTAACTGATCTCTCATGTTTTAT  
CTCAGGATAACGACACCCGGAAGAGGGCCAGAAGAAAAGAACGGACGTAACAACCTCCAGTGGAAGATTGACTAGAGAGTACAAAATA

3400



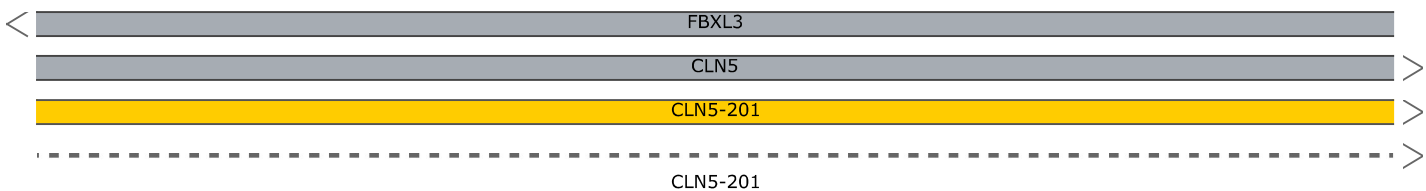
TTGGCCTCTCTCCATACCCTCTTTTAATTCGTGAAATAAGGTTTACTTTATAGCAAATTCAGTCCTGTCAGATCTGCTACTTAAC  
AACCGGAGAGAGGTATGGGAGAAAATTAAGCACTTTATTCCAAATGAAATATCGTTTAAGTCAGGACAGTCTAGACGATGAATTG

3485



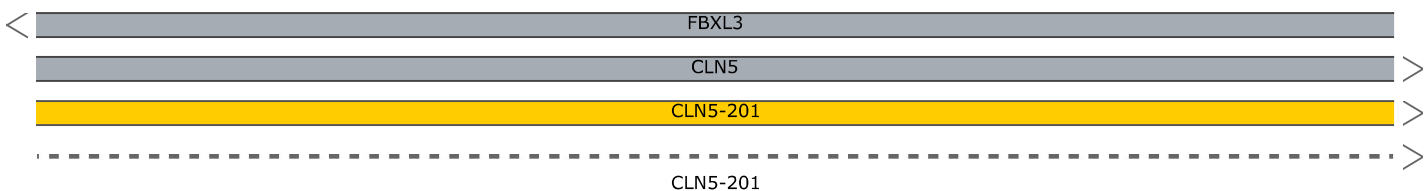
ATCCTTTAAGTTTAGCCCTCCCAATTATAAGGCAGGGAATTCATGCACATTCTCCTAGTGACAAAATGACAGCCCCTGCCAGT  
TAGGAAATTCAAATCGGGAGGGGTTAATATTCCGTCCCTTAAGGTACGTGTAAGAGGATCACTGTTTTACTGTGCGGGACGGTCA

3570



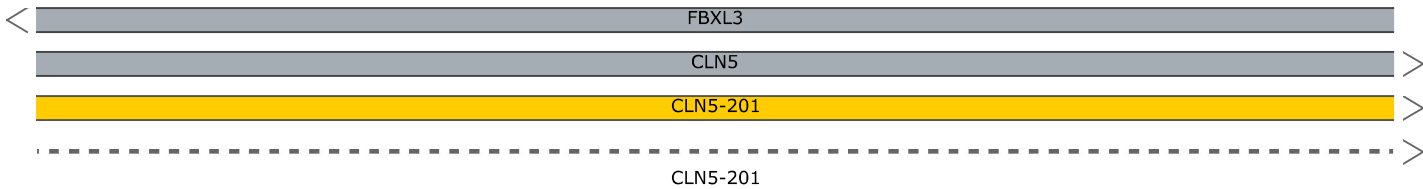
CTCTTCCGTCTCCATTCTGCGTCGAGGCCTGAAATCCAGTCTTCCGTACCTACCGGAGACCAAATGTGCCAGGCTTGTCTTACA  
GAGAAGGCAGAGGTAAGGACGCAGCTCCGGACTTTAGGTCAGAAGGCATGGATGGCCTCTGGTTTACACGGTCCGAACAGAATGT

3655



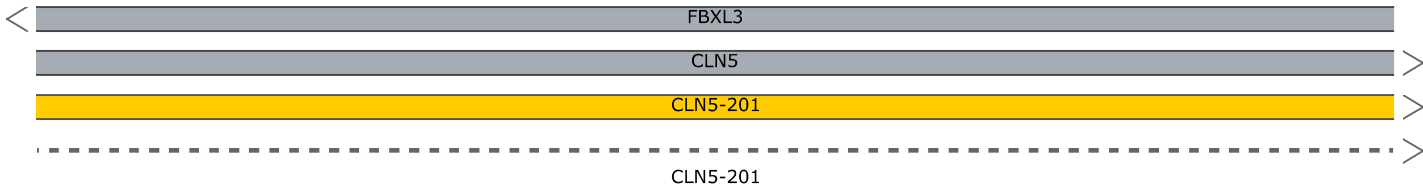
ATACTTAAACATTTCTCTGCCTTTCTGTCTTAACCTTCTAATCAACTACATTAACCACTAGGCCCGGCCTTCATCTCTTTCTTT  
TATGAATTGTAAAGGAGACGGAAAGACAGAATTGGAAGATTAGTTGATGTAATTTTTGGATCCGGGCCGGAAGTAGAGAAAAGAAA

3740



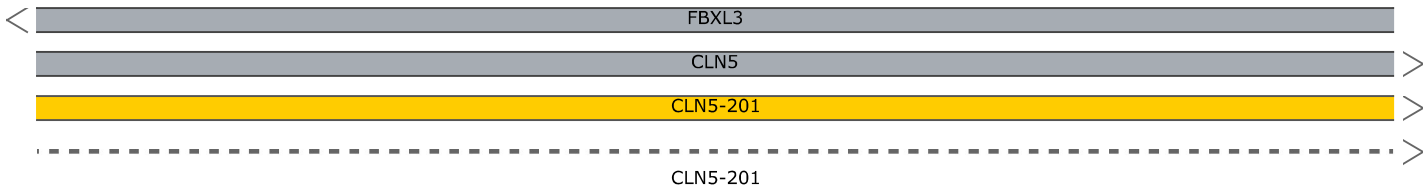
GCCCTCCCCACCCCATTCATCCCATACCTGGTTAACAATGATTTGTCTTCCTGTGTGCCCATAGGACTCATTCTTTAGTCTAG  
CGGGAGGGGTGGGGTAAGTAGGGTATGGACCAATTGTTACTAACAGGAAGGACACACGGGTATCCTGAGTAAGGAAATCAGATC

3825



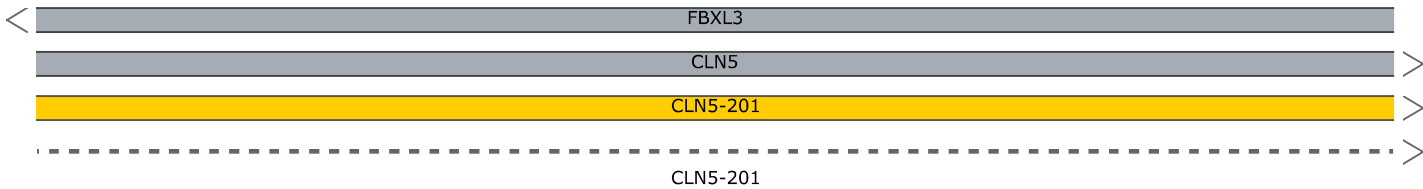
CACATACCACACTCATTACTTGTTCAGTGTCTTTCCAGCTCCCACCCACAGTTCATGAGAAAAGGGAACAGTGTTTTAATTTTTG  
GTGTATGGTGTGAGTAATGAACAAGTCACAGAAAGGTCGAGGGTGGGTGTCAAGGTACTCTTTCCCTTGTCCACAAAATTAACAAAC

3910



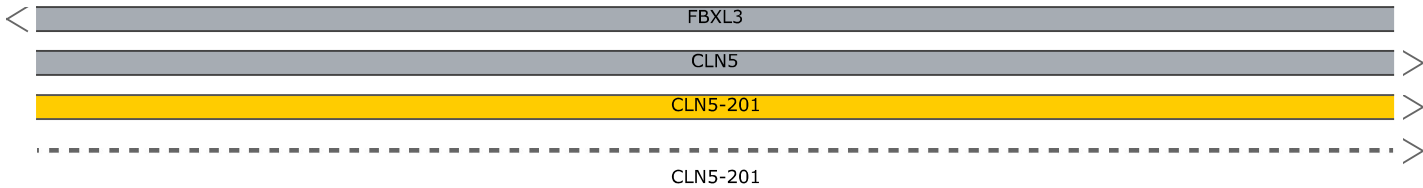
TTTCCCTCCTTCTTACTATAGTTCACTATATATGTAGTGGAGCCTCAATAAATATTGGTTGAATGAATGTTAATTCGTAAGTAAA  
AAAGGGAGGAAGAATGATATCAAGTGATATATACATCACCTCGGAGTTATTTATAACCACTTACTTACAATTAAGCATTTCATTT

3995



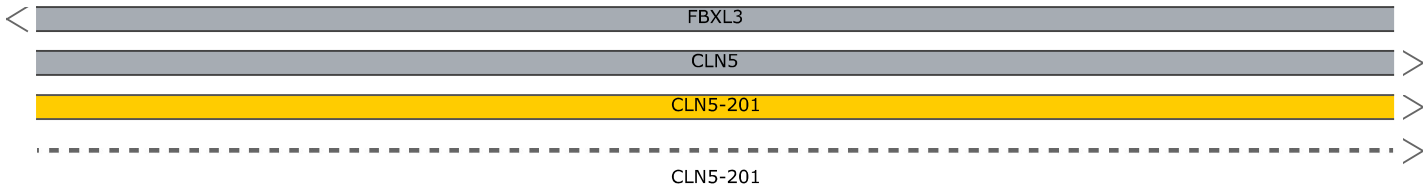
TATAAAATGATTCTGTTACTCATAATTATCTGAATAATCTTAATGTATGGACTGTTTGTAAAATTGAACACATTGGAAAAATGT  
ATATTTTACATAAGACAATGAGTATTAATAGACTTATTAGAATTACATACCTGACAAACATTTTAACTTGTGTAACCTTTTTTACA

4080



TCATTTATTCTGTAAACATTTGCAAATGTCTACTATGATCTGGAGCTATAAAAAATTTAAGACAAAATTCCTGTCTTCAAATTT  
AGTAAATAAGACATTTGTAAACGTTTACAGATGATACTAGACCTCGATATTTTTAAAATTTCTGTTTTAAGGACAGAAGTTTTTAAA

4165





TCACAGTGGGATCAGGGAACAGGGAAGCCCGTATTTATCAGAGTGTCTTTTAGTTTATCATTTGCTATTAACAAACATTATTGGAAAG  
AGTGTCAACCTAGTCCCTTGTCCCTTCGGGCATAAATAGTCTCACGAAAATCAAATAGTAAACGATAATTTTTTGTAAATAACCTTC

4250

FBXL3

CLN5

CLN5-201

CLN5-201

TTTGTTCAACAAGATAACAAAATGTGTGTTTATATTTATTAACCTATGGTCCGACCTTTGAATGGTCCCCTAAAAATGTTACTGGAT  
AAACAAGTGTCTATTGTTTTACACACAAAATATAAATAAATTGATACCAGGCTGGAAAACCTACCAGGGGATTTTTACAATGACCTA

4335

FBXL3

CLN5

CLN5-201

CLN5-201

TCTAAAAGACGTGAGAAGAATCAGATTCATTTTAGAATCTAAGTAGATGGTTTTCTTTTCTTTATTAGGCGCTTTGACTTCCGTC  
AGATTTTCTGCACTCTTCTTAGTCTAAGTAAAATCTTAGATTCACTACCAAAGAAAAAGAAAATAATCCGCGAAAACCTGAAGGCAG

4420

FBXL3

CLN5

CLN5-201

CLN5-201

60  
R F D F R  
ENSE00003724627

CAAAACCTGATCCTTATTGTCAAGCTAAGTATACTTTCTGTCCAACCTGGCTCACCTATCCCAGTTATGGAGGGTGATGATGACAT  
GTTTTGGACTAGGAATAACAGTTCGATTCAATGAAAGACAGGTTGACCGAGTGGATAGGGTCAATACCTCCCCTACTACTGTA

4505

FBXL3

CLN5

CLN5-201

CLN5-201

65 70 75 80 85 90  
P K P D P Y C Q A K Y T F C P T G S P I P V M E G D D D I  
ENSE00003724627

TGAAGTTTTTTCGATTACAAGCCCCAGTATGGGAATTTAAATATGGAGACCTCCTGGGACACTTGGTAAGGATGCATCTTGGTCTT  
ACTTCAAAAAGCTAATGTTTCGGGGTCATACCCTTAAATTTATACCTCTGGAGGACCTGTGAACCATTCTACGTAGAACCAGAA

4590

FBXL3

CLN5

CLN5-201

CLN5-201

95 100 105 110  
E V F R L Q A P V W E F K Y G D L L G H L  
ENSE00003724627

ATAACTTTGGTTAATTCAATGATTTGGTTATTAAGTTGATTTTTAAGGAGTAATCACTATTTAGATGGCTGACTTTAGATCATGT  
TATTGAAACCAATTAAGTTACTAAACCAATAATTCAACTAAAAATTCCTCATTAGTGATAAATCTACCGACTGAAATCTAGTACA

4675

FBXL3

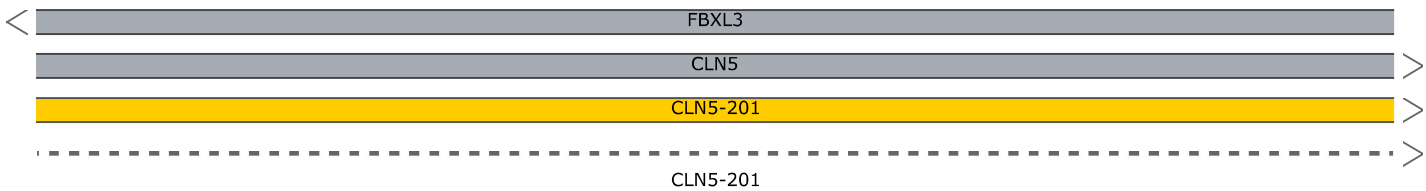
CLN5

CLN5-201

CLN5-201

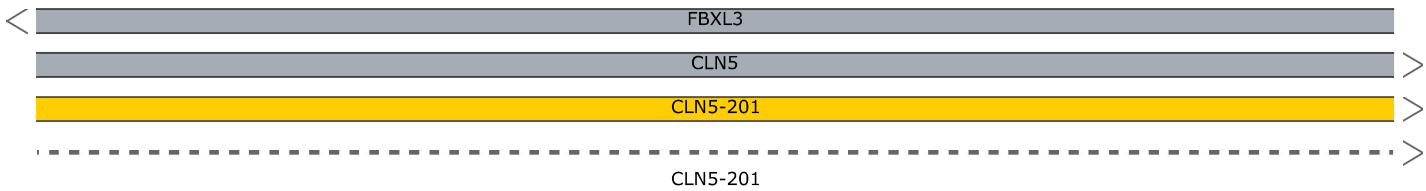
TGGTGTTTGTCTTAGTACATTTAAAATGAGTAGTCAAAAATAGTTACTATCAGATTTTGTAAATCTTGACAACAACAAATGTAATC  
ACCCACAAACAGAATCATGTAAATTTTACTCATCAGTTTTTATCAATGATAGTCTAAAAACATTAGAAGCTGTTGTTGTTTACATTAG

4760



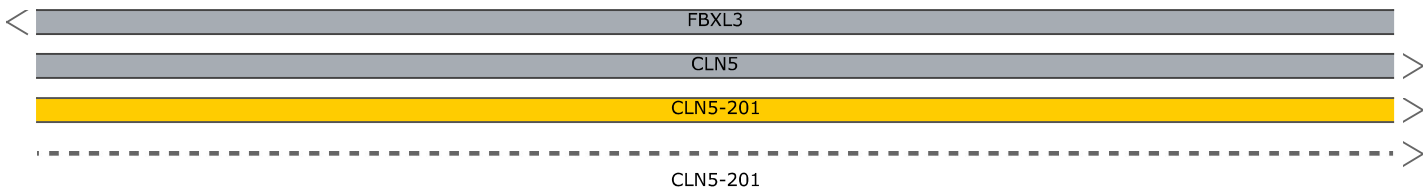
ACCATTATCCATTGTAATATTATGAATCTGAAACCAGCTCCTGTACCTAGCTCCTGGAAGGTGAGAAGAGGCCAGAAAGTGGCAG  
TGGTAATAGGTAACATTATAATACTTAGACTTTGGTCGAGGACATGGATCGAGGACCTTCCACTCTTCTCCGGGTCTTCACCGTC

4845



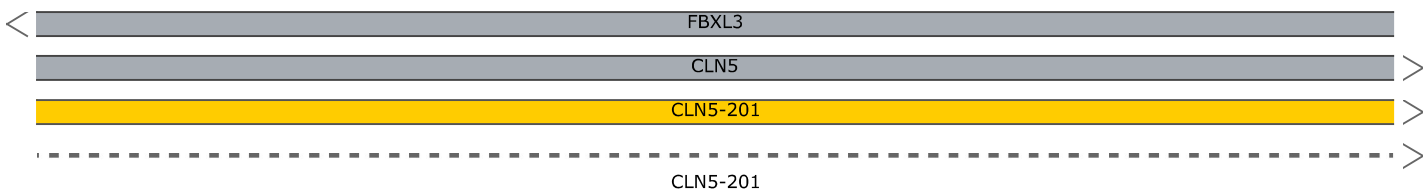
GGCAGGCAGGTAACACCTCTTGATTTCCATACTCTGTTGTAGTCACTTTTCCAGGTTAACCCATCACCATGTGAGGTCTGTAGAG  
CCGTCCGTCCATTGTGGAGAACTAAAGGTATGAGACAACATCAGTGAAAAGGTCCAATTGGGTAGTGGTACACTCCAGACATCTC

4930



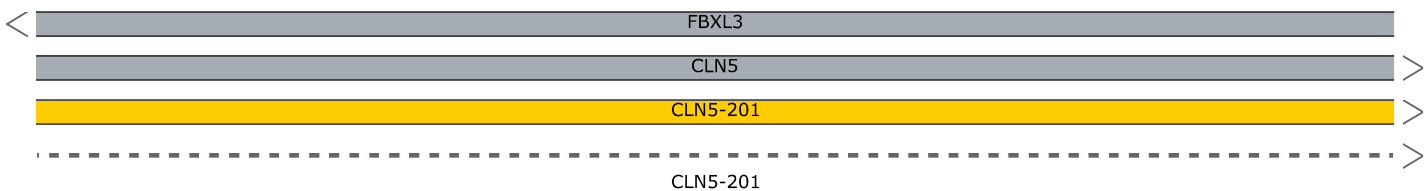
CTGCTTCCAGAGACTGGCATGGGGGCTCCTCACACTTATTCTAAGCTCTAAGGAAATTATCAGCTTGTCCACATAACATGCAGGC  
GACGAAGGTCTCTGACCGTACCCCCGAGGAGTGTGAATAAGATTTCGAGATTCTTTAATAGTCGAACAGGTGTATTGTACGTCCG

5015



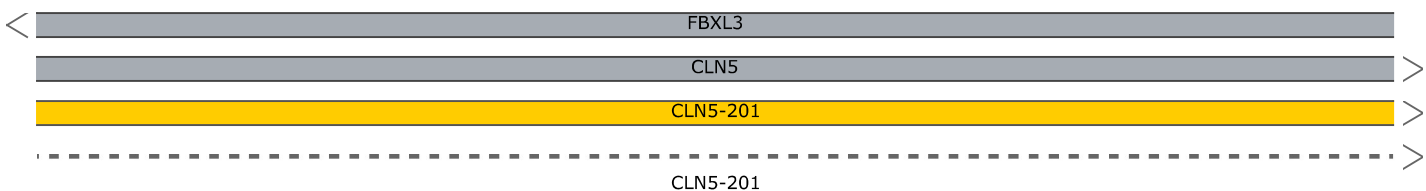
CTCCTATTTGAGATGAGCCAAATAGGGGTGTAGTGGCCAAAGCTGGGGTGGATGAGGGCCTGGAGTTTGGGGCCACAGAGTGGAT  
GAGGATAAACTCTACTCGGTTTATCCCCACATCACCGGTTTCGACCCACCTACTCCCGGACCTCAAACCCCGGTGTCTCACCTA

5100



ATGACAGTAGCAGCATGGAAGAACAGCTGAACAGTTGTTCTACTTGATATGCATTTGTGATGTGCCACATTTTCTCCTATCAGGT  
TACTGTCATCGTCGTACCTTCTTGTGCGACTTGTCAACAAGATGAACTATACGTAAACACTACACGGTGTAAAAGAGGATAGTCCA

5185



TACCTGGACCCATGGTTGTGTGCACAGTTGCTTTTATACATGTACTGTCTTTACACAGAAAATTATGCATGATGCCATTGGATTCA  
ATGGACCTGGGTACCAACACAGTGTCAACGAAAATATGTACATGACAGAAAATGTGTCTTTTAATACGTACTACGGTAACCTAAGT

5270

FBXL3

CLN5

CLN5-201

115 120  
K I M H D A I G F  
ENSE00000684230

CLN5-201

GAAGTACATTAAGTGGCAAGAACTACACAATGGAATGGTATGAACTTTTCCAACCTGGCAACTGTACATTTCCCATCTCCGACC  
CTTCATGTAATTGACCGTTCTTGATGTGTTACCTTACCATACTTGAAAAGGTTGAACCGTTGACATGTAAAGGGGTAGAGGCTGG

5355

FBXL3

CLN5

CLN5-201

125 130 135 140 145 150  
R S T L T G K N Y T M E W Y E L F Q L G N C T F P H L R P  
ENSE00000684230

CLN5-201

TGAAATGGATGCCCTTTCTGGTGTAAATCAAGGCGCTGCCTGCTTTTTTGGAGGAATTGATGATGTTCACTGGAAGGAAAATGGG  
ACTTTACCTACGGGGAAAGACCACATTAGTTCCGCGACGGACGAAAAAACTCCCTTAACTACTACAAGTGACCTTCTTTTTACCC

5440

FBXL3

CLN5

CLN5-201

155 160 165 170 175  
E M D A P F W C N Q G A A C F F E G I D D V H W K E N G  
ENSE00000684230

CLN5-201

ACATTAGTTCAAGTAGCAACTATATCAGGTAAGTTGTGAAAATATAGCAATATTTGATCATTGCATCAAAAACCAAATGAAAGAA  
TGTAATCAAGTTCATCGTTGATATAGTCCATTCAACACTTTTATATCGTTATAAACTAGTAACGTAGTTTTTGGTTTTACTTTTCTT

5525

FBXL3

CLN5

CLN5-201

180 185  
T L V Q V A T I S  
ENSE00000684230

CLN5-201

ATTGTTATACTTCCATTGAAACATTTTCAGTAATGTTTTACTTAGAGGGTCATTTGTAAAATGTACTTTTGGAACCATTAACCTTTG  
TAACAATATGAAGGTAACCTTTGTAAAGTCATTACAAAATGAATCTCCAGTAAACATTTTACATGAAAACCTTGGTAATTTGAAAC

5610

FBXL3

CLN5

CLN5-201

CLN5-201

GGAATTTTTTTCATCTCTTATTTGTATTTTTATTTATTTTGAATAGGTTTGTGGGGAACCTGGTTATGTTAAGTTACATGA  
CCTTAAAAAAGTAGAGAATAAACATAAAAAATAAATAAAATAAACTTATCCAAAACACCCCTTGACCAATACAATTCATGTA

5695

FBXL3

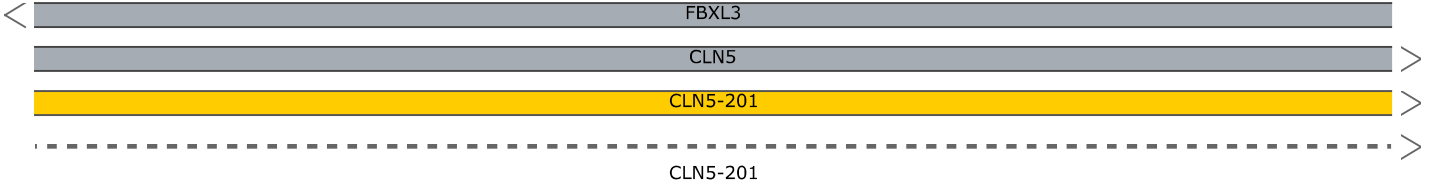
CLN5

CLN5-201

CLN5-201

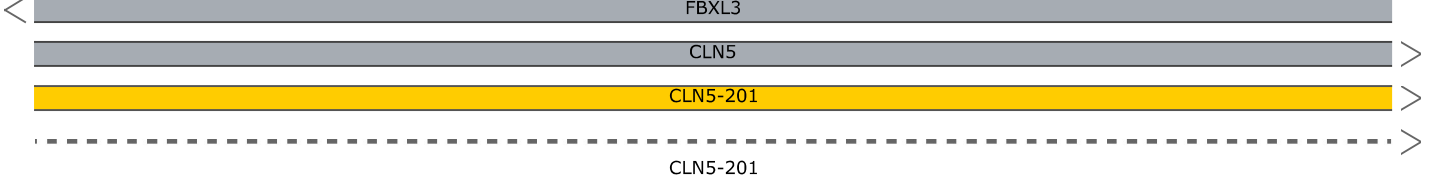
ATAAGTTCTTTAGTGGTGATTTCTGAGATTTTTGCGCACCCATCACCCGAGCAGTGTACACTGTACCCAATGTATAGTCTTTTTAT  
TATTCAAGAAATCACCACTAAAGACTCTAAAAACGCGTGGGTAGTGGGCTCGTACATGTGACATGGGTTACATATCAGAAAAATA

5780



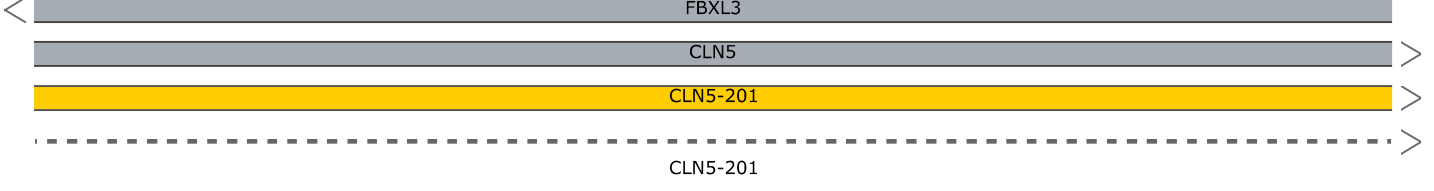
CCCTCACCCCTCTCCGACCCTTTTCCCGACTTCCCAAAGTTAATCATTCTTATGCCTTTGCATCCTCATAGCTTAGCTCCCACT  
GGGAGTGGGGAGAGGCTGGGAAAAGGGGCTGAAGGGTTTCAATTAGTAAGAATACGGAAACGTAGGAGTATCGAATCGAGGGTGA

5865



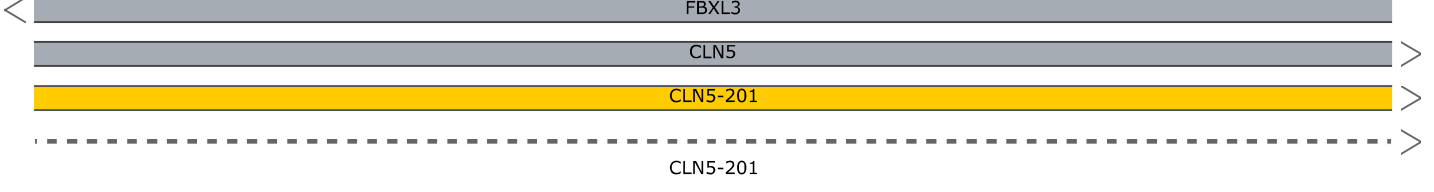
TACAAGTGAGAATACACAATGTTTGGTTTTCTATTCTGAAGAGTTACTTCACTTGGATGGAATTGGAGACCATTATTCCAGGTT  
ATGTTCACTCTTATGTGTTACAAACCAAAGATAAGGACTTCTCAATGAAGTGAACCTACCTTAACCTCTGGTAATAAGGTCCAA

5950



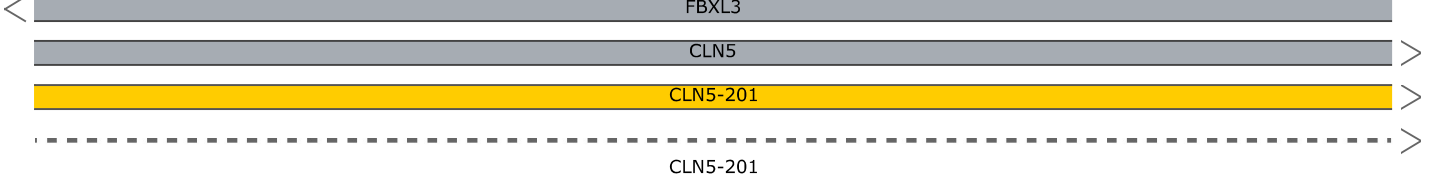
GCTGCAAATGCCATTATTTCACTTCTTTTTATGGCTGAGTAGTATTATTCCTTGGTATATATACACCACATTTTCTTTATCCACT  
CGACGTTTACGGTAATAAAGTAAGGAAAAATACCGACTCATCATAATAAGGAACCATATATATGTGGTGTAAAAGAAATAGGTGA

6035



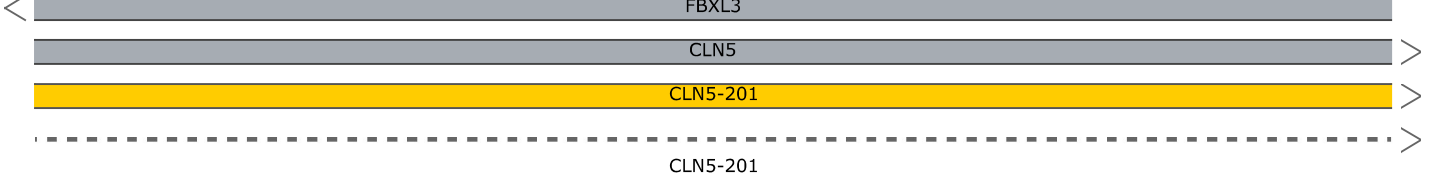
CATTGATTGATGGGCATTTGAGCTGGTTCCATATTTTTGCAGTTGCAAATTGTGCTGCTATAAACATGCATGGGAAAAGTATTTTT  
GTAACATAACTACCCGTAAACTCGACCAAGGTATAAAAAACGTCAACGTTTAAACACGACGATATTTGTACGTACCCTTTTATAAAAA

6120



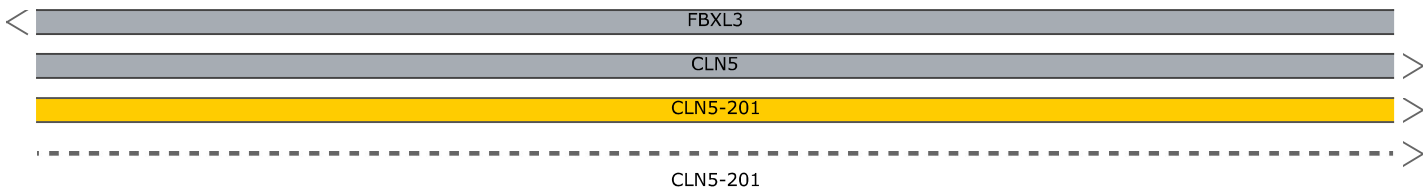
TGCGTATAATGAGTTCTTCTTCTTTGGGTAGATACCCAGTACTGGGATTGCTGGATCAAATGGCAGTTCTACTTTTTAGTTCTTTA  
ACGCATATTACTCAAGAGAAGGAAACCCATCTATGGGTGATGACCCTAACGACCTAGTTTACCGTCAAGATGAAAATCAAGAAAT

6205



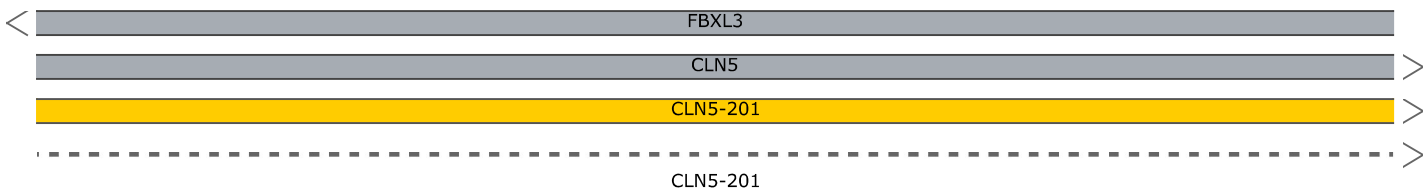
AGGAATCTCCACACTGTTTTCCATAGTGGTTGTAATAATTTACATTTCCTAGCAGCAGAGAAGAAGTGTTCCTTTCCCCACATC  
TCCTTAGAGGTGTGACAAAAGGTATCACCAACATGATTAATGTAAGGATCGTCTCTCTTCTTCCACAAGGGAAAGGGGGTGTAG

6290



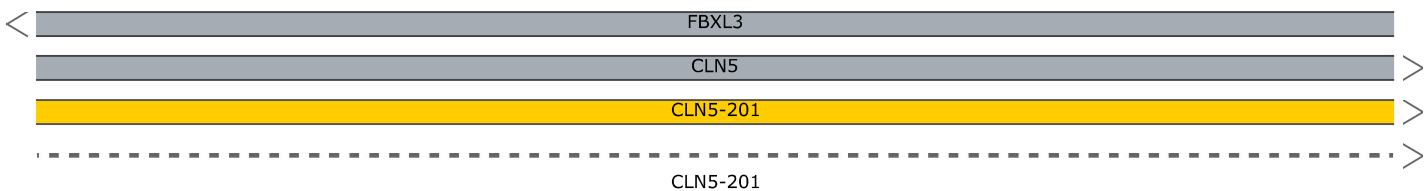
CCGCCAATATCTATTTTTTTTTTATTTTTTATTGATTATGGCCATTCTTGCAGGAGTGAGGCGGTATTACATTGTGGTTTTGATTGCA  
GGCGGTTATAGATAAAAAAAAAATAAAAACTAATACCGGTAAGAACGTCCTCACTCCGCCATAATGTAACACCAAACTAAACGT

6375



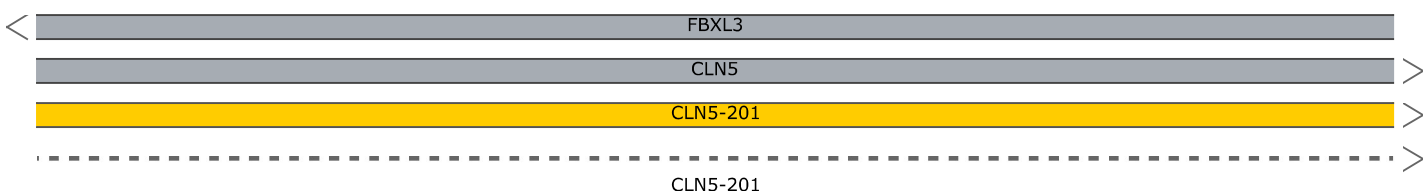
TTTCCCTGATCATTGCATTTCCCTGAGCATTTTCATGTTTCTTGGCCATTTGTATATCTTCTGAGAATTGTCTATTTGTGTCCTT  
AAAGGGACTAGTAACGTAAGGGACTCGTAAAAGTACAAAGAACC GGTAACATATAGAAGACTCTTAACAGATAAACACAGGAA

6460



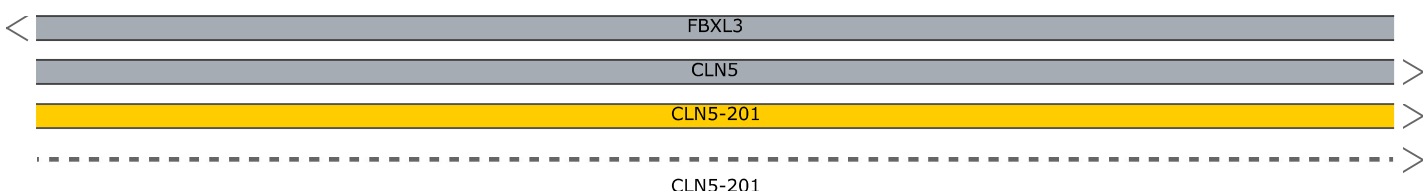
AGCCACCCCCACCCCGCCTTTTTGTTGTTGTTGTTGTTGTTGAGGTGGAGTTTTATTCTTGTGCTCAGGCTGGAGTGCAAT  
TCGGTGGGGGTGGGGCGGAAAAACAACAACAACAACAACAACCTCCACCTCAAAATAAGAACAGCGAGTCCGACCTCACGTTA

6545



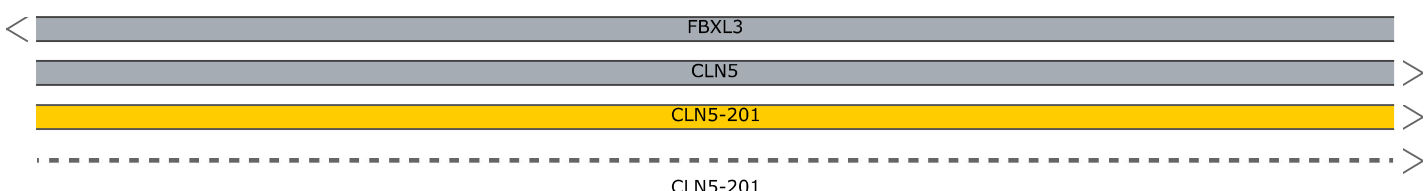
GACACAATCTCAGCTTGCTGCAACCTCCACCTCTTGGGTTCAAGCGATTCTCCAGCCTTAGCGTCCCAAGTAGCTGGGATTACAG  
CTGTGTTAGAGTCGAACGACGTTGGAGGTGGAGAACC CAAGTTCGCTAAGAGGTCGGAATCGCAGGGTTCATCGACCCTAATGTC

6630



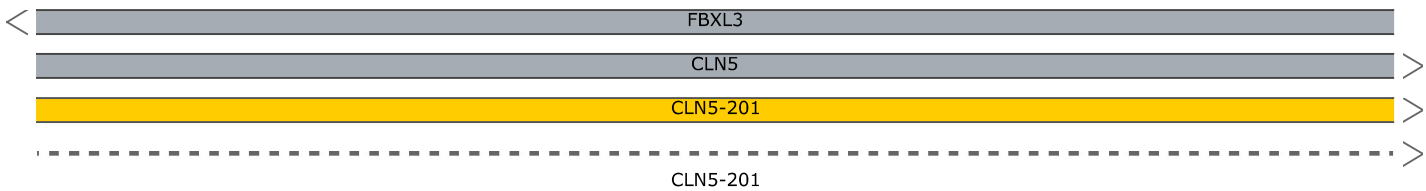
GCGCCCGCCACCATGCCAAGCTAATTTTTGTATTTTTAGTAGAGATGGGGTTTTCGCCATGTTGGCCAGCTGGTCTCAAACCTCCTG  
CGCGGGCGGTGGTACGGTTCGATTAAAAACATAAAAAATCATCTCTACCCCAAAGCGGTACAACCGGTCGACCAGAGTTTGAGGAC

6715



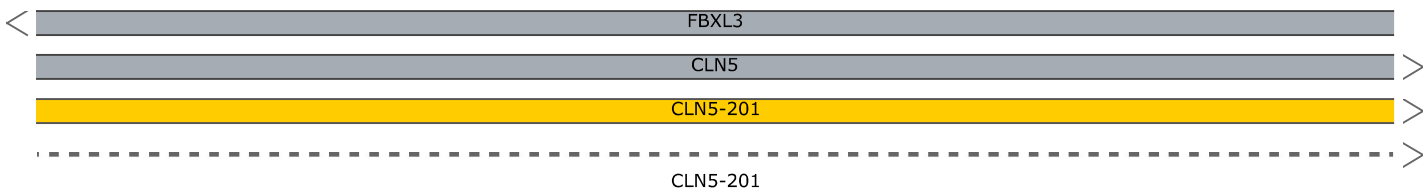
ACCTCAGGTCATCTGCCACCTTGGCCTCCCAAAGTGCTGGGATTAAGGTGTGAGCCACCACTCCCAGGCGGTTAACCCACTTTT  
TGGAGTCCAGTAGACGGGTGGAACCGGAGGGTTTACAGACCCTAATTTCCACACTCGGTGGTGAGGGCCGGCAATTGGGTGAAAA

6800



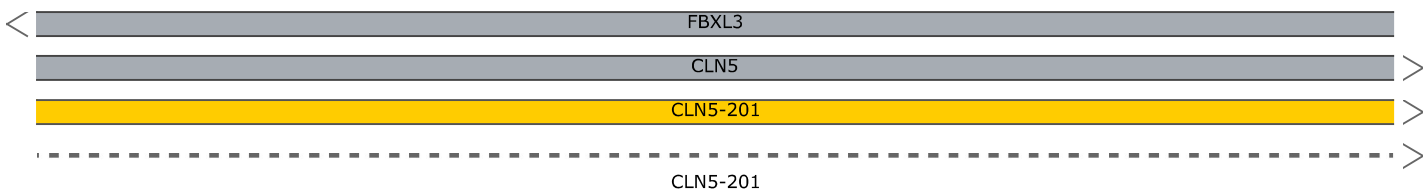
TGATGGGATTGTTTTTTCTTGCTGATTTGAGTTCTTGTAGATTCTGGATATTAGTCCTTTGTCAGATGTATAGATTGCAAAGA  
ACTACCCTAACAAAAAAGAACGACTAAACTCAAGGAACATCTAAGACCTATAATCAGGAAACAGTCTACATATCTAACGTTTCT

6885



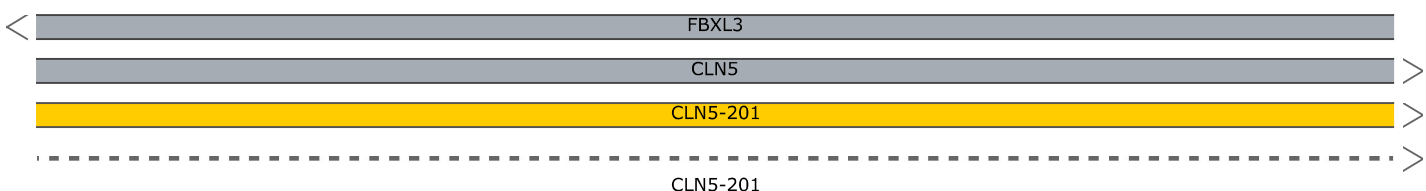
TTTTCTCCCACTCTGTGGGTTGTCTATTTACTCTGCTGATTGTTCTTTGGCTGTGCAGAAGCTTTTTAGTTTAATTAAGTCTCA  
AAAAGAGGGTGAGACACCCAACAGATAAATGAGACGACTAACAAAGGAAACCGACACGTCTTCGAAAAATCAAATTAATTCAGAGT

6970



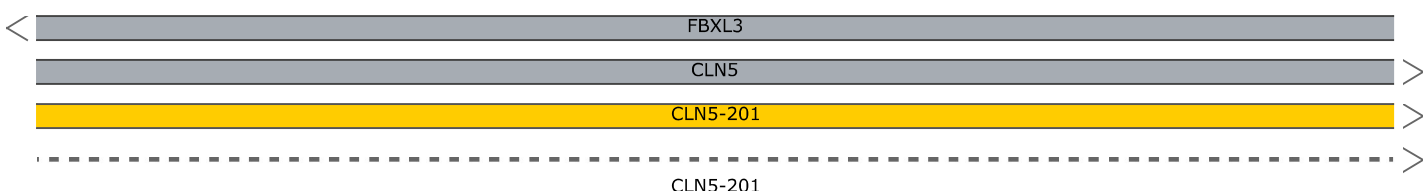
TCTATTTATATTTGTTTTGTTGCATTTGCTTTTGGTGGAAACCACTAAACTCTGACCCAAACTATTACTCATGCAGAACTTCACC  
AGATAAATATAAACAAAAACAACGTAAACGAAAACCACTTTGGTGATTTGAGACTGGGTTTGATAATGAGTACGTCTTGAAGTGG

7055



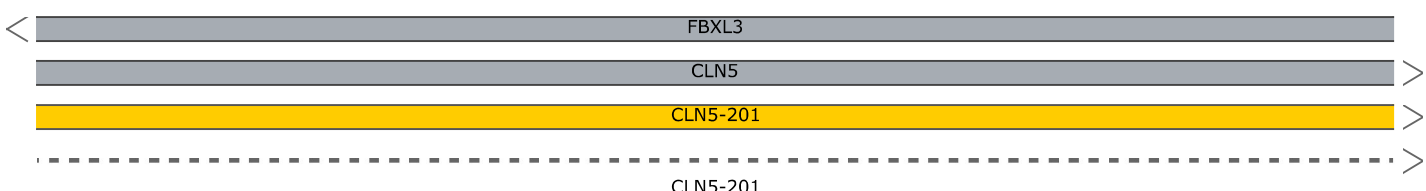
TGTTGGTGATGAGTAGCTTATCTCTGATCTTTGAATGTTTCCCTAAAAATGCTCTTTTCCCATCATAAAAAATGAATAAAATGATA  
ACAACCACTACTCATCGAATAGAGACTAGAACTTACAAAGGGATTTTACGAGAAAAGGGTAGTATTTTTACTTATTTTTACTAT

7140



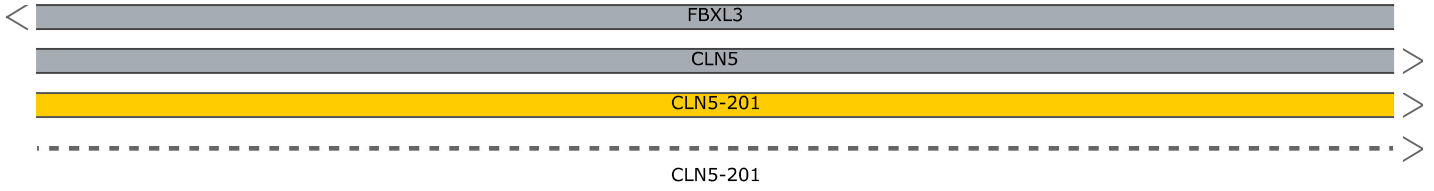
AAACATTTTGTACAATTAATTTGGTCTTTCTAAACGAAATAGTAAGAGAAATCCATAAAATGCCTGATTAAGGATATGTTAACT  
TTTGTAAAACATGTTAATTTAACAGAAAGATTTGCTTTATCATTCTTTAGGTATTTTACGGACTAATTTCTATACAATTGA

7225



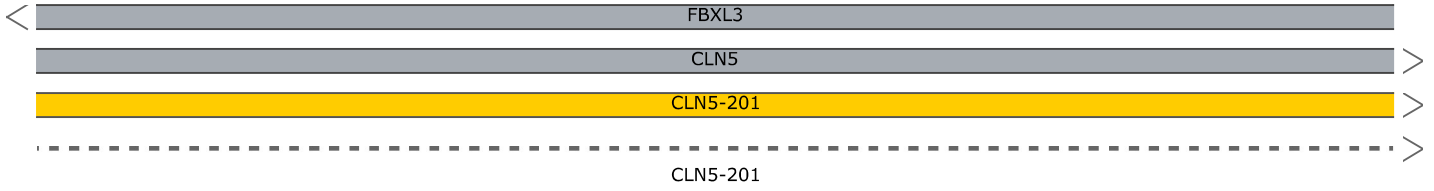
ATATCTGAAAAAAAAATTTTAGTGATGATATTTTTATGTTGAAAAATAATAGCTACTAATATAGACTGGTTCTGGCACTGTTCTGAG  
TATAGACTTTTTTTAAAATCACTACTATAAAAAACAACCTTTTTATTATCGATGATTATATCTGACCAAGACCGTGACAAGACTC

7310



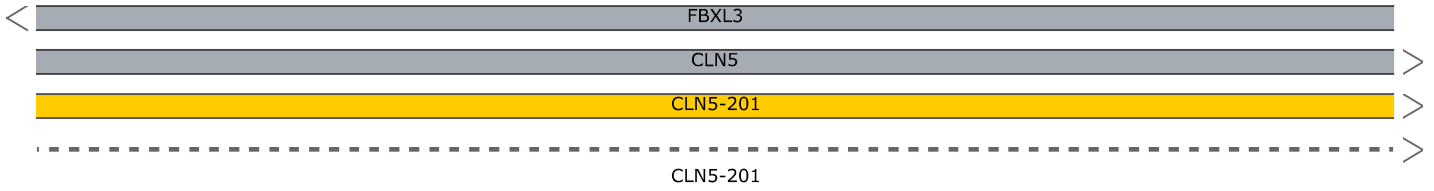
TACTGTACATACATCACATCATTTCATCATCACAACTTCTGGAGGTAGTAACTATTATTTTGCCTATTTTACAGATGGAGAACTG  
ATGACATGTATGTAGTGTAGTAAGTAGTAGTGTGAAGACCTCCATCATTGATAATAAAACGGATAAAAATGTCTACCTCTTTGAC

7395



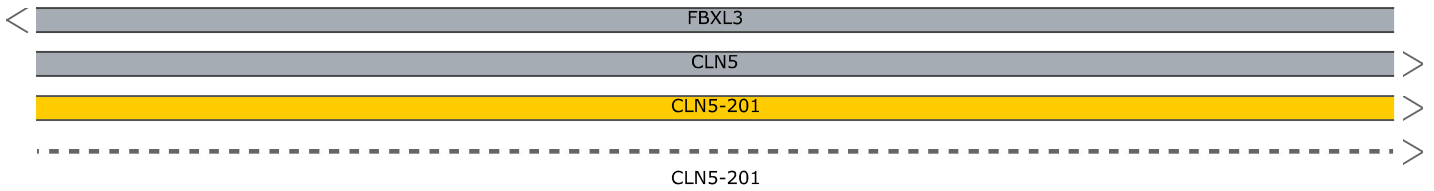
AGGCACAGAGAGGTTAAAGTTACACAGCTTAGTAAGTGGGACTCCAACCCTGGCAGTTACGCCCATTTGCCATTCTCCTAACTA  
TCCGTGTCTCTCCAATTTCAATGTGTGGAATCATTCAACCTGAGGTTGGGACCGTCAATGCGGGGTAACGGGTAAGAGGATTGAT

7480



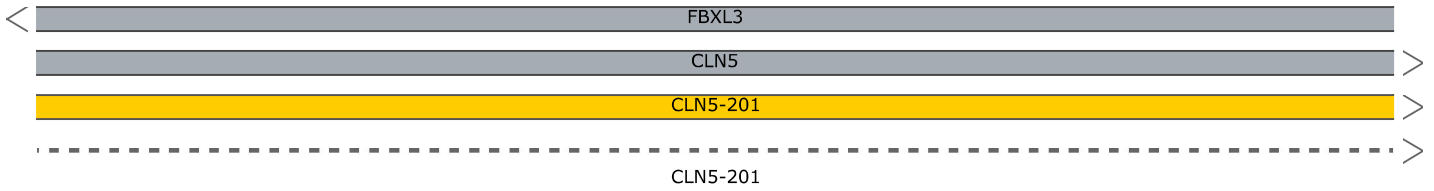
CTTTGATACATTGCCTCCCAAAATGTATATGATCTTATATTTGAGACCCTCTTGAGCAGTTTAAATATTTTATCTTTGAGATTTT  
GAAACTATGTAACGGAGGGTTTTACATATACTAGAATATAAACTCTGGGAGAACTCGTCAAATTTATAAAATAGAAACTCTAAAA

7565



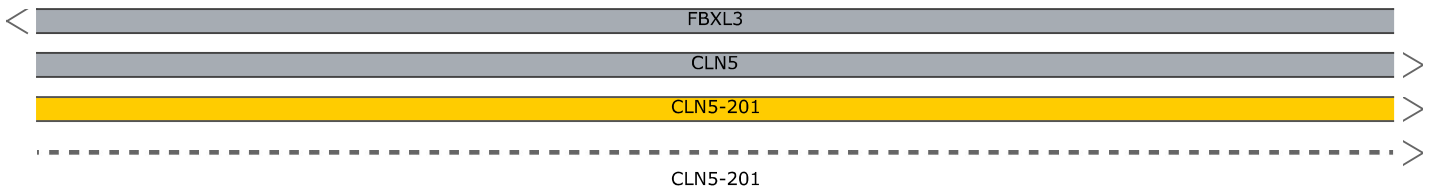
TTTCTTCTTTTGGATGTATTGGAAAAGTTGCTGAAAAGTTGGAATTGTGTTGCAAGTGCTGCATTGTTGGTTAGTAATGAAAAGAGT  
AAAGAAGAAAACCTACATAACCTTTCAACGACTTTCAACCTTAACACAACGTTACGACGTAACAACCAATCATTACTTTTTCTCA

7650



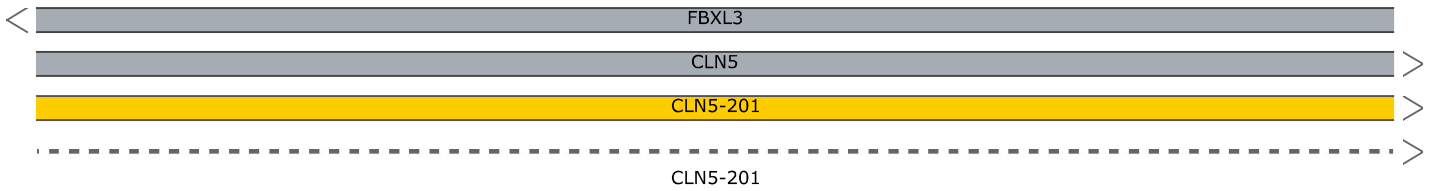
TCAGCAATCCTTTTCATTGGTAACTCCTTATGTGACTTGGGTCACATTTTATATCTTATTGGCCCGTTGCCTCATGTGCAAAATGG  
AGTCGTTAGGAAAAGTAACCATTGAGGAATACACTGAACCCAGTGTAATAATATAGAATAACCGGGCAACGGAGTACACGTTTTACC

7735



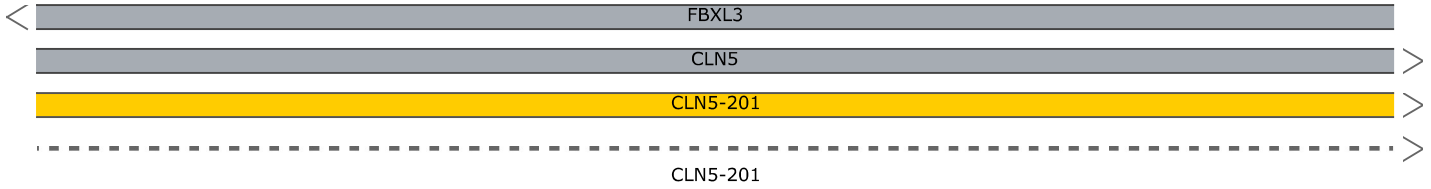
AGACAATATACCATAGCATTGAGAAAGTAAGGAGCTTGTCCATATGATTTATGAAGCATTACATTATAAAATTGCTGTTCCCCAGA  
TCTGTTATATGGTATCGTAAACTCTTCATTCCCTCGAACAGGTATACTAAATACTTCGTAATGTAATATTTAACGACAAGGGGTCT

7820



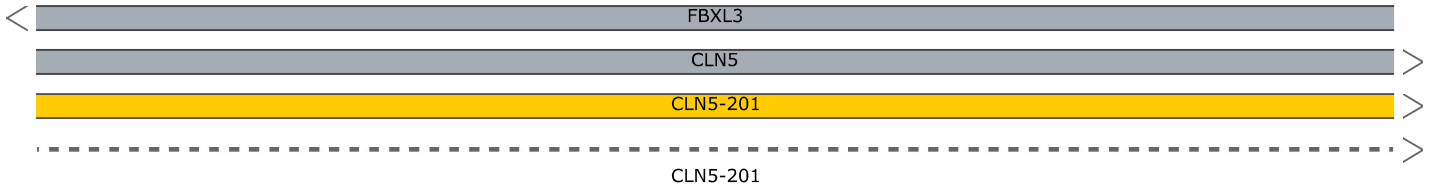
ACAGTAGAAACATCTGAAATGAAAGCACTGTTGTGACAATAATTATTCAGTGAACCCAGGACTTGAGGAAGTAATCATGCTTCC  
TGTCATCTTTGTAGACTTTACTTTTCGTGACAACACTGTTATTAATAAGTCACTTGGGGTCTCGAACTCCTTCATTAGTACGAAGG

7905



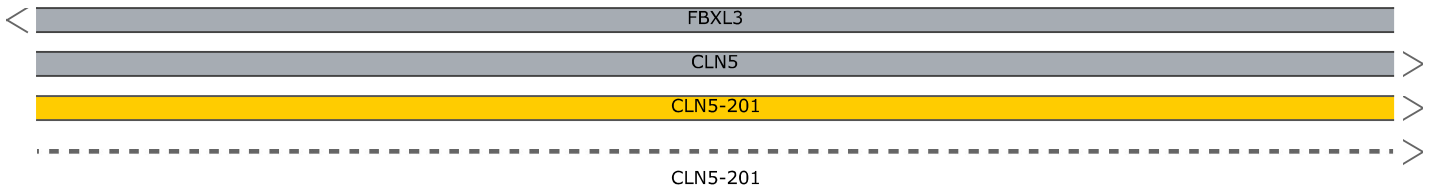
TATTTGTATAGCTCTTTACAAATGATTTGGAGGTATGTTAACTCACGGTTCAGTGGAGAGGATAAGATACTCATTCTCTGCAAAT  
ATAAACATATCGAGAAATGTTTACTAAACCTCCATACAATTGAGTGCCAAGTCACTCTCTCTATTCTATGAGTAAGAGACGTTTA

7990



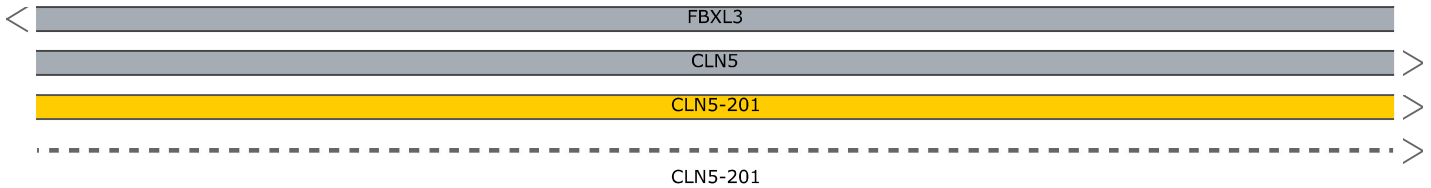
AAGGAATTGAGGCTCAGCCAGGTAACATGACTTACTTGCCTCTCAAGGTCAAAGAGCTGGATGTAGCAGAATCAGGAATAAACT  
TTCCTTAACTCCGAGTCGGTCCATTGTACTGAATGAACGGAGAGTTCCAGTTTCTCGACCTACATCGTCTTAGTCCTTATTTTGA

8075



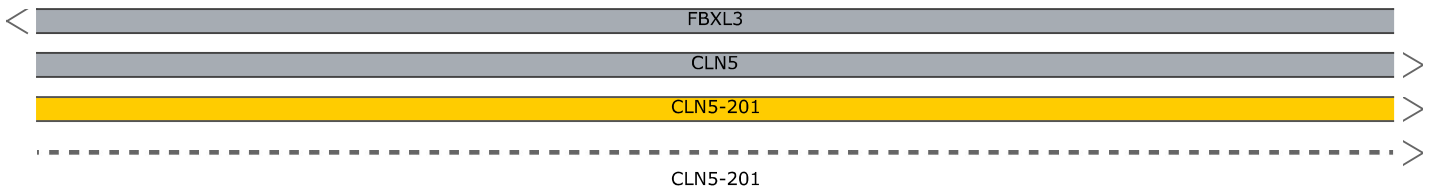
GAGGTCTTTTAAATGTAACAAGGATCTGTTAGCCGAATGCACCATGTTGTTTTCTAATATTTCTGCTACTTTCTAATCAATGTG  
CTCCAGAAAATTTACATTGTTCCTAGACAATCGGCTTACGTGGTACAACAAAAGATTATAAAGGACGATGAAAAGATTAGTTACAC

8160



CCTTAAACCATAACCAACAATACAAAAGTCCATCATTAGCGGTTCTTTCTTTTATTCCAGGCCAGTTCACACCTTTCCCCATTTCC  
GGAATTTGGTATGGTTGTTATGTTTTAGGTAGTAATCGCCAAGAAAAGAAAGTAAGGTCCGGTCAAGTGTGAAAAGGGGTAAAGG

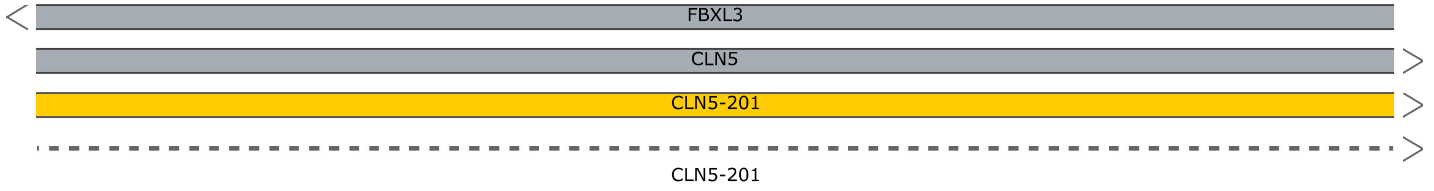
8245





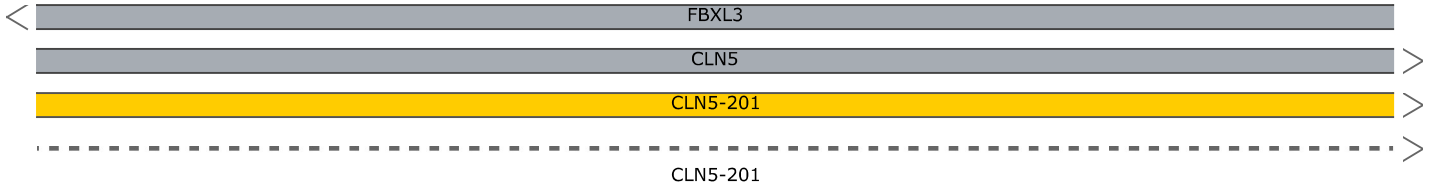
ACCTACATCGTTATCTGAAAAATCCTTCCTTCTGACATAAAGTCAATGATCATATGAATAAGTGATCACTATTTTTTGTAAAAATAG  
TGGATGTAGCAATAGACTTTTTAGGAAGGAAGACTGTATTTTCAAGTTACTAGTATACTTATTTCACTAGTGATAAAAAACATTTTTATC

8330



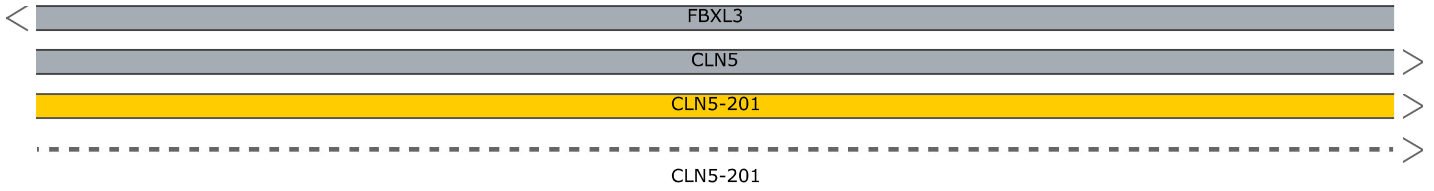
TTCAAAATATGCCAGTACTTAAATCTTTTAAGTCATTTATTTGCCTTGTGAATAATCCTGTGATTGACAAAATAGTGTTTTGAAG  
AAGTTTTATACGGTCATGAATTTAGAAAATTCAGTAAATAAACGGAACTTATTAGGACACTAACTGTTTTATCACAAAACCTTC

8415



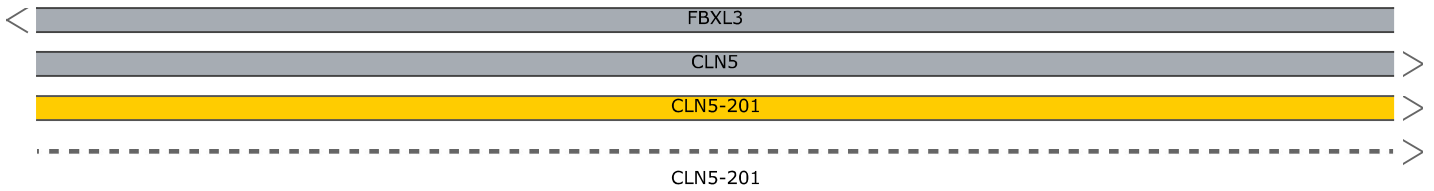
CATTCTTGTCTCATAAGGATAGTGGTGGCATTGAAAAGTTGAAGAATGCTAAGAACAGTATCCCCAGTTCTAATACAACAGGCTT  
GTAAGAACAGAGTATTTCTATCACCACCGTAAACTTTCAACTTCTTACGATTCTTGTGCATAGGGGTCAAGATTATGTTGTCCGAA

8500



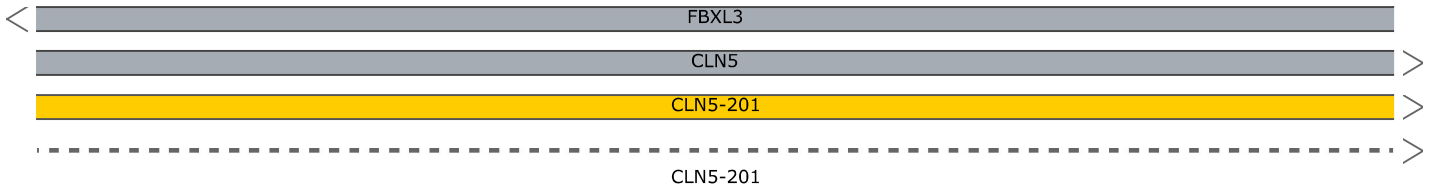
TATTCTGTTCTACAATTTTAATTCCATAAAATTGATAAAGGCAGTCACTCTATTCATTTTACAGAACATGAAGTATTTATTTTAT  
ATAAGACAAGATGTTAAAATTAAGGTATTTTAACTATTTCCGTCAGTGAGATAAGTAAAATGTCTTGTACTTCATAAATAAAATA

8585



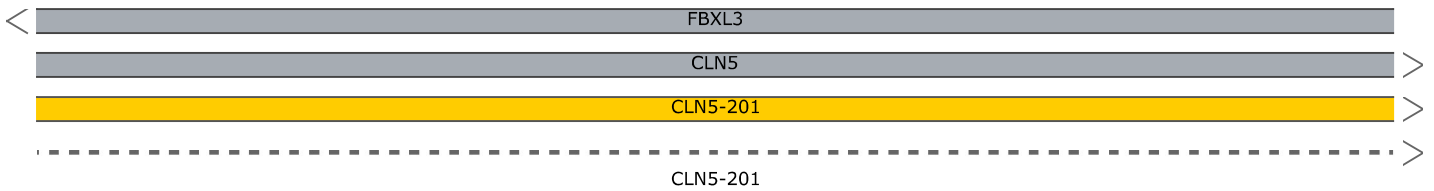
GGACTCAAGTTGGAGTAACCAAAGAGGTTTGCACACAGTGACAGGATGCAGTGTTTGGGGCCCAGTTCTATTAGGCATTATAAAT  
CCTGAGTTCAACCTCATTGGTTTTCTCCAAACGTGTGTCACTGTCTACGTCCACAAACCCCGGGTCAAGATAATCCGTAATATTTA

8670



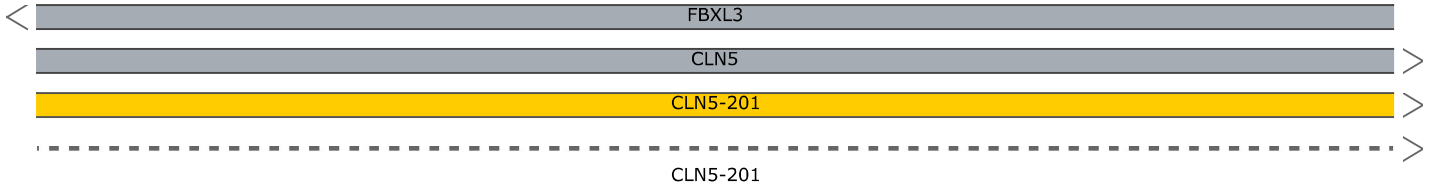
GCCCAAGATGAGAGTTGTAACCATGCAGAGTAGTGTTTTCTGAATATTTGGAAAGATTCTTCTGGTCTAGTACAAGATGGTAGAA  
CGGGTTCTACTCTCAACATTGGTACGTCTCATCACAAAAGACTTATAAACCTTTCTAAGAAGACCAGATCATGTTCTACCATCTT

8755



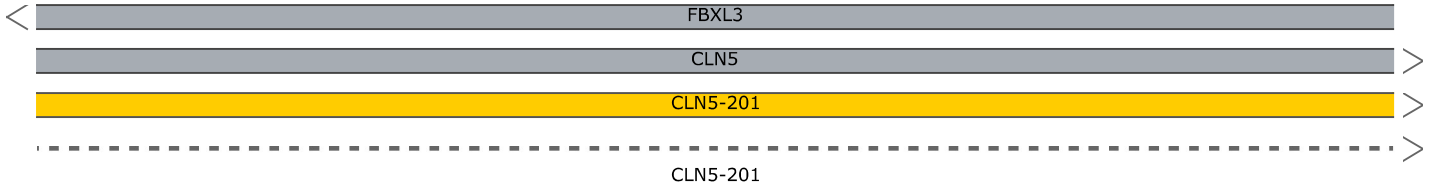
GAGAGGGTTAGCCATCCTGGAGTATGAACTCGGCCTAAAAACATTTCCAGTTTAGTTGATTTGTTGGAAGGACTTAACGTGGCAGG  
CTCTCCCAATCGGTAGGACCTCATACTTGAGCCGGATTTTGTAAAGGTCAAATCAAATAAACCAACCTTCTGAATTGCACCGTCC

8840



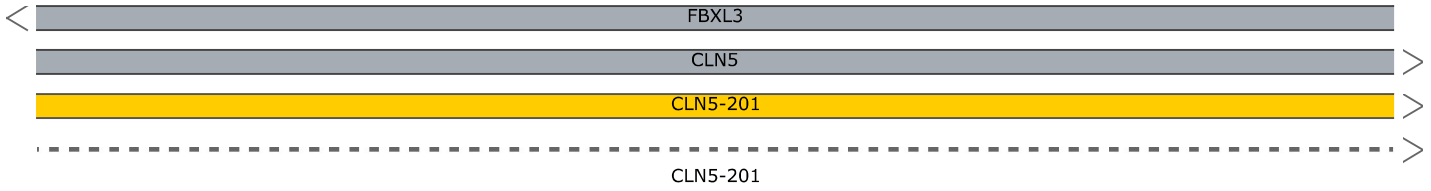
TGGAGAGGTCATCAGCAGCATCCCAGCAACTCCAAGTACAGGGAAGAAAGAAACGTACCAAACACACAAGGTGGATGGGGTATGG  
ACCTCTCCAGTAGTCGTCGTAGGGTCGTTGAGGTTTCATGTCCCTTCTTTCTTTGCATGGTTTGTGTGTTCCACCTACCCCATACC

8925



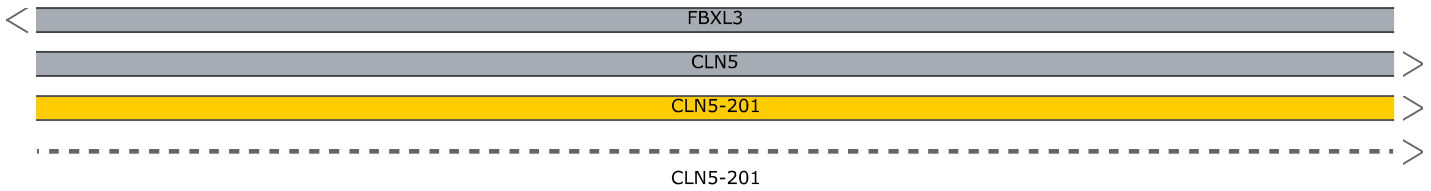
TGCTTGTTCATAACAGTAATAGCCAGCCTTCTAGAGCAGTGGCTCCTCAGGCAGCCATTCATACTTTATGTGTAGCATGCTTT  
ACGAAACAAGAGTATTGTCATTATCGGTCGGAAGATCTCGTCAACGAGGAGTCCGTCGGTAAGTATGAAATACACATCGTACGAAA

9010



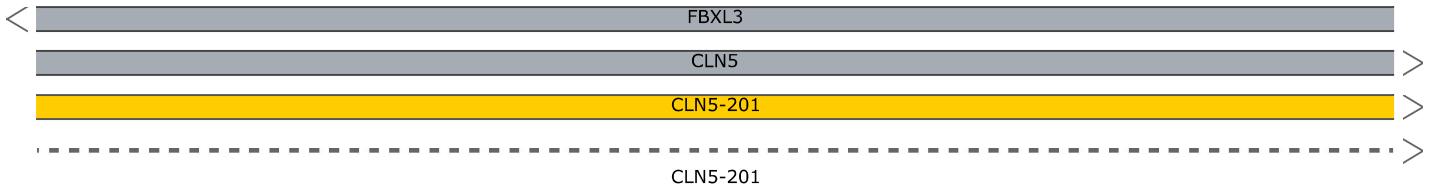
GCAACAGTGAAGCTCCACATTTCCACACCTCCATTTTCTTACACTGTCTTTGCCATTCTGCTTTTCTCTTTTCGCAATTCTT  
CGTTGTCACTTCGAGGTGTAAAGGGTGTGGAGGTAAAAGGAATGTGACAGAAACGGGTAAGACGAAAAGGAGAAAGCGTTAAGAA

9095



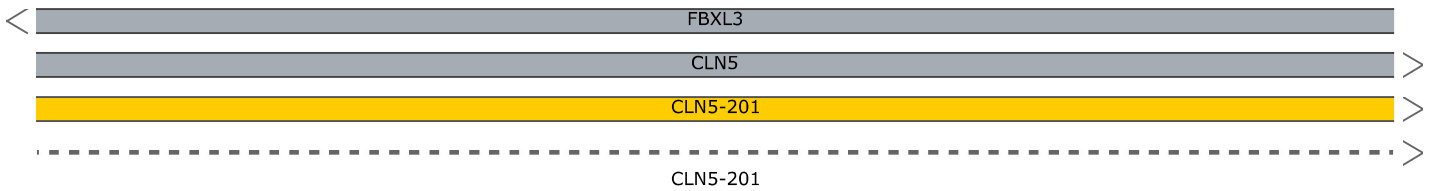
TTTGTGCTTTCCTTTTCTCTTTTGCCTCTGAATCCAAGATTTGGTGAGTTGGGTAGAGAAAAGAGAGCTTCTGCATTTGTATAATT  
AAACACGAAAAGGAAAAGAGAAAACGGAGACTTAGGTTCTAAACCACTCAACCCATCTCTTTCTCTCGAAGACGTAAACATATTAA

9180



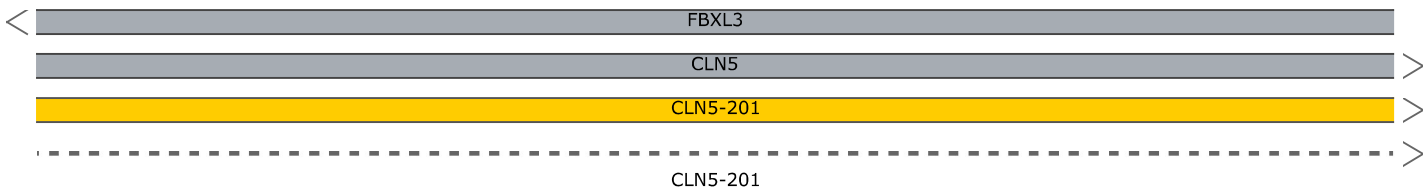
TCGCTTTGACTATAGCTTAAATGATTATAGAATTAGTATGTAAGATGACTTCTCCTTATACACCTATTATATCTAATGTTTATAA  
AGCGAAACTGATATCGAATTTACTAATATCTTAATCATACTTCTACTGAAGAGGAATATGTGGATAATATAGATTACAAATATT

9265



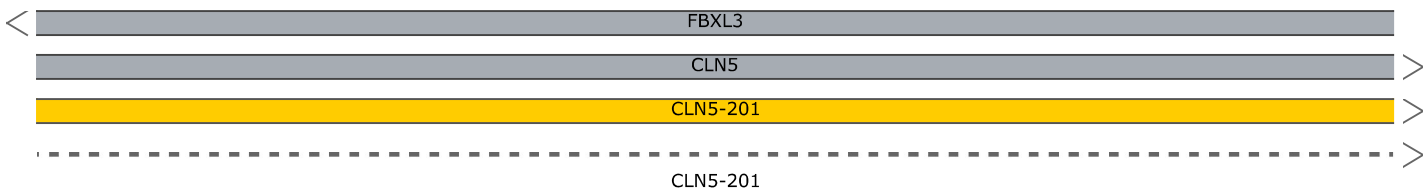
TTCAGAAATATCTTGTGCCTTGAAGAATGGAATAAAATTGGCTGAGCTTGGATTCTGTTGTGAAATGCAGGTGTGGAAATTCAA  
AAGTCTTTATAGAACACGGAACCTTCTTACCTTATTTTAACCGACTCGAACCTAAGGACAACACTTTACGTCCACACCTTTAAGTT

9350



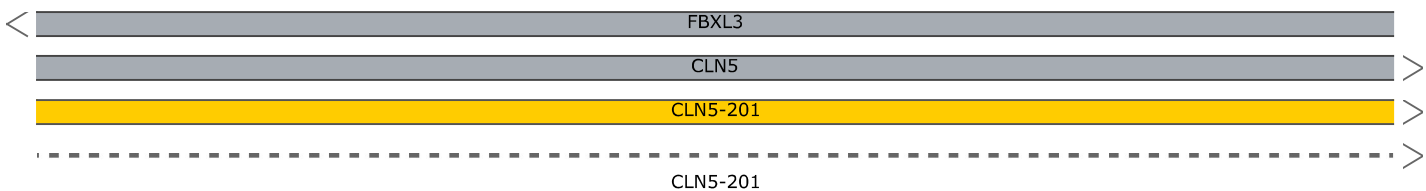
AACCATTGTTTACTCAGGCATCCAGTCTTAATCAAGTTAGAACATTTTACTTAAAATTAATATGATTAGGCCAGCCATGGTAGCT  
TTGGTAACAAATGAGTCCGTAGGTCAGAATTAGTTCAATCTTGTAAAATGAATTTTAATTATACTAATCCGGTCGGTACCATCGA

9435



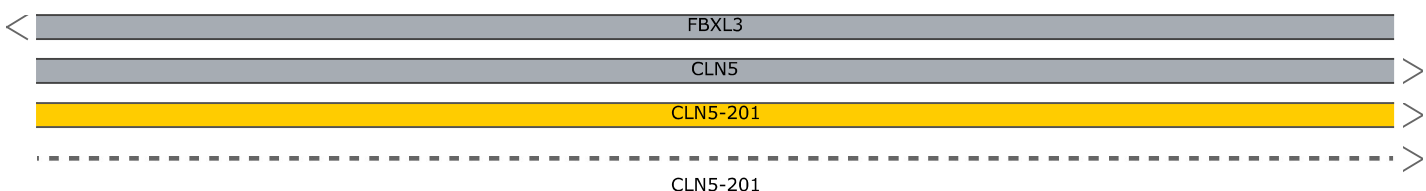
CAAACCTATAATCCCAGTGCTTTAGAATGCTGAAGCAGGAGGATCACTTGAGGTTGGGAATTTGAGACCAGCCTGGGCAATACAG  
GTTTGGATATTAGGGTCACGAAATCTTACGACTTCGTCTCCTAGTGAACCTCAACCCCTTAAACTCTGGTCGGACCCGTTATGTC

9520



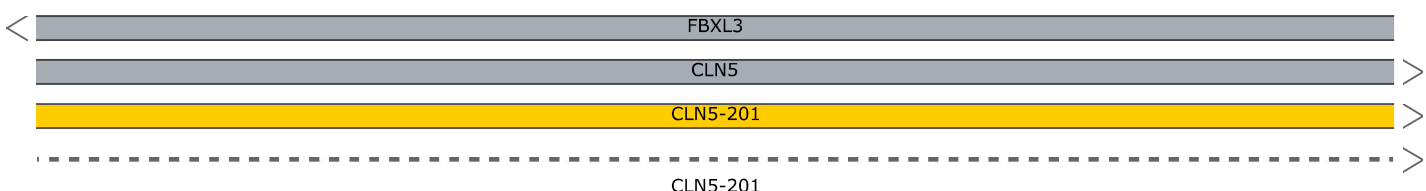
CAAGACCCCGTGTTGCCAGGCTGGTCTCAAATTAAGAAAGAAAAATTAAGTTGGGTTTGGTGGCCAGCGCCTGTA  
GTTCTGGGGCACAACGGGTCCGACCAGAGTTAATTTTTTTTCTTTTTAATTTTTTAATCAACCCAAACCACCGGTCGCGGACAT

9605



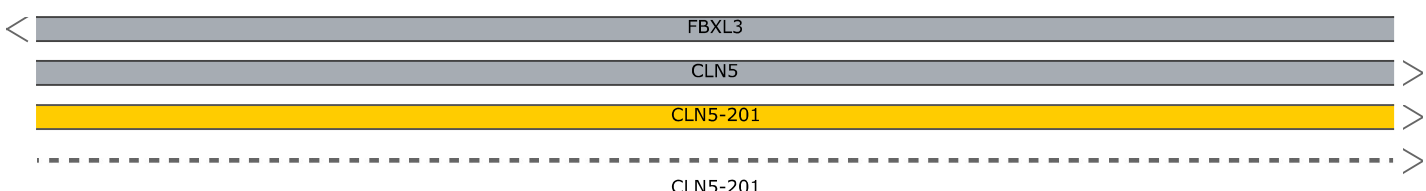
GTCCCAGCTACTCAGGAGGCCGAGGTGGGAGGATCACTTAAGCCCAGGAGGTCAAGGCTGCAGTGAGCTGTGATGTTACCACCGC  
CAGGGTCGATGAGTCTCCGGCTCCACCCTCCTAGTGAATTCGGGTCCTCCAGTTCGACGTCCTCGACACTACAATGGTGGCG

9690



ACTCTAGCCTCGGCAACAGAGGGAGACCTGTCTTAAAAAAAAAAAAAAAAAAAAAAAAAATTAACATGATTAGCTTTGTTCACTAGGTGAC  
TGAGATCGGAGCCGTTGTCTCCCTCTGGACAGAATTTTTTTTTTTTTTTTTTTAATTGTACTAATCGAAACAAGTGATCCACTG

9775



TTTGTTTTGTTTTTTTTAAACTAGGAAACATGTTCAACCAAATGGCAAAGTGGGTGAAACAGGACAATGAAACAGGAATTTATTAT  
AAACAAAACAAAAAATTTGATCCTTTGTACAAGTTGGTTTACCGTTTCACCCACTTTGTCTGTTACTTTGTCTTAAATAATA

9860

FBXL3

CLN5

CLN5-201

190 195 200 205  
G N M F N Q M A K W V K Q D N E T G I Y Y  
ENSE00003903672

CLN5-201

GAGACATGGAATGTAAAAGCCAGCCAGAAAAGGGGGCAGAGACATGGTTTTGATTCCTACGACTGTTCCAAATTTGTGTTAAGGA  
CTCTGTACCTTACATTTTCGGTCGGGTCTTTTCCCGTCTCTGTACCAAATAAGGATGCTGACAAGGTTTAAACACAATTCCT

9945

FBXL3

CLN5

CLN5-201

210 215 220 225 230 235  
E T W N V K A S P E K G A E T W F D S Y D C S K F V L R  
ENSE00003903672

CLN5-201

CCTTTAACAAGTTGGCTGAATTTGGAGCAGAGTTCAAGAACATAGAAACCAACTATACAAGAATATTTCTTTACAGTGGAGAACC  
GGAAATTGTTCAACCGACTTAAACCTCGTCTCAAGTTCTTGTATCTTTGGTTGATATGTTCTTATAAAGAAATGTCACCTCTTGG

10,030

FBXL3

CLN5

CLN5-201

240 245 250 255 260 265  
T F N K L A E F G A E F K N I E T N Y T R I F L Y S G E P  
ENSE00003903672

CLN5-201

TACTTATCTGGGAAATGAAACATCTGTTTTTGGGCCAACAGGAAACAAGACTCTTGGTTTAGCCATAAAAAGATTTTATTACCCC  
ATGAATAGACCTTTACTTTGTAGACAAAAACCCGGTTGTCTTTGTTCTGAGAACCAAATCGGTATTTTCTAAAATAATGGGG

10,115

FBXL3

CLN5

CLN5-201

270 275 280 285 290  
T Y L G N E T S V F G P T G N K T L G L A I K R F Y Y P  
ENSE00003903672

CLN5-201

TTCAAACCACATTTGCCAACTAAAGAATTTCTGTTGAGTCTCTTGCAAATTTTTGATGCAGTGATTGTGCACAAACAGTTCTATT  
AAGTTTGGTGTAACCGTTGATTTCTTAAAGACAACTCAGAGAACGTTTAAAACTACGTCACTAACACGTGTTTGTCAAGATAA

10,200

FBXL3

CLN5

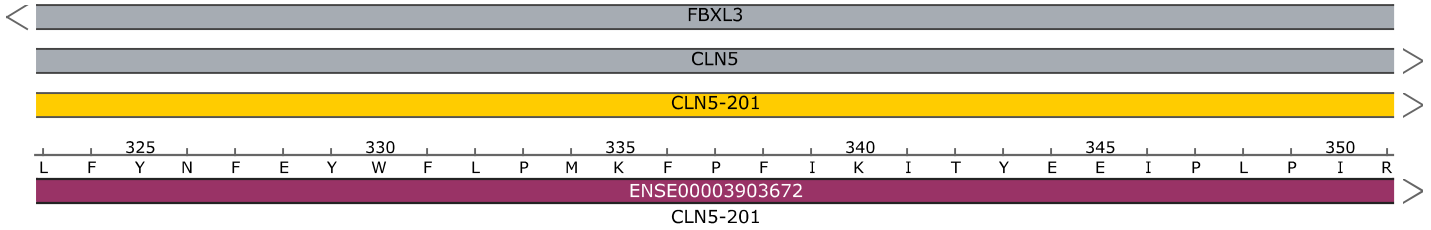
CLN5-201

295 300 305 310 315 320  
F K P H L P T K E F L S L L Q I F D A V I V H K Q F Y  
ENSE00003903672

CLN5-201

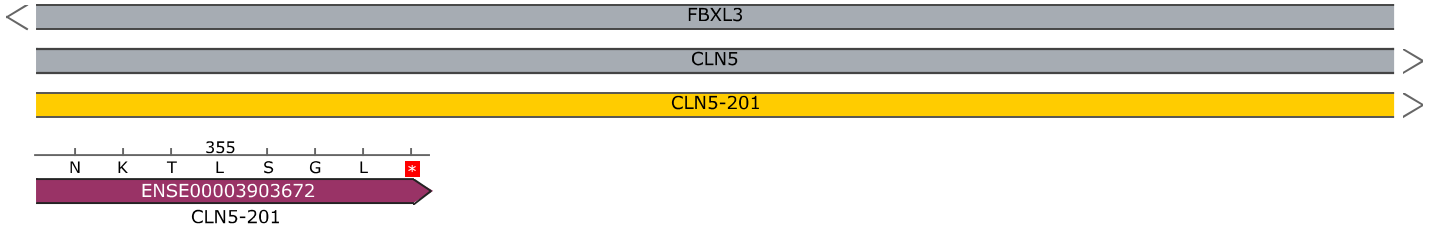
TGTTTTATAATTTTGAATATTGGTTTTTACCTATGAAATTCCTTTTATTAAAAATAACATATGAAGAAATCCCTTTACCTATCAG  
ACAAAAATATTAACCTTATAACCAAAAAATGGATACTTTAAGGGAAAAATAATTTTATTGTATACTTCTTTAGGGAAATGGATAGTC

10,285



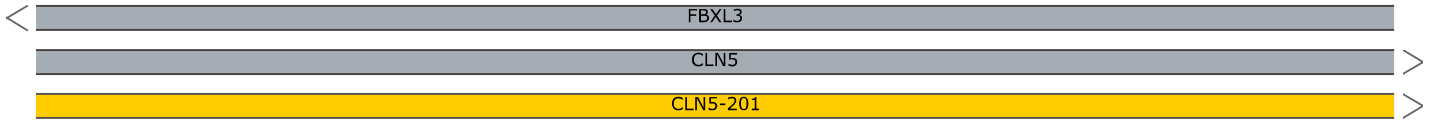
AAACAAAACACTCTCTGGTTTATAAAAACACCTTAATTCTACTGCTCTTTTTTCTCCAATCACCAGCATCTGTTTTTTCAGGGGGTG  
TTTGTGTTTGTGAGAGACCAAATATTTTGTGGAATTAAGATGACGAGAAAAAAGAGGTTAGTGGTCGTAGACAAAAAGTCCCCCAC

10,370



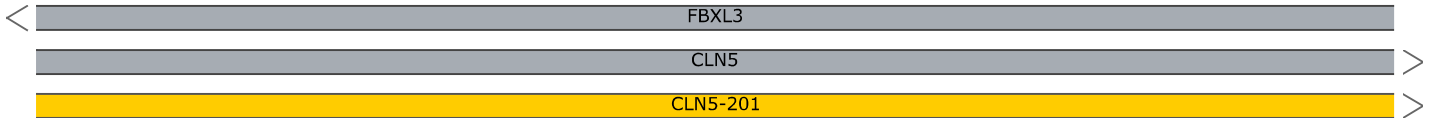
ATTTTACTTTTTGTGAATTCCTTAGCCTTTCTTCTTGGTGCATAAAGTTAAAAATGCACATCAGCAGAATTGCTGCATATTAACAT  
TAAAAATGAAAACACTTAAGGAATCGGAAAGAAGGAACCACGTATTTCAATTTTACGTGTAGTCGTCTTAACGACGTATAATTGTA

10,455



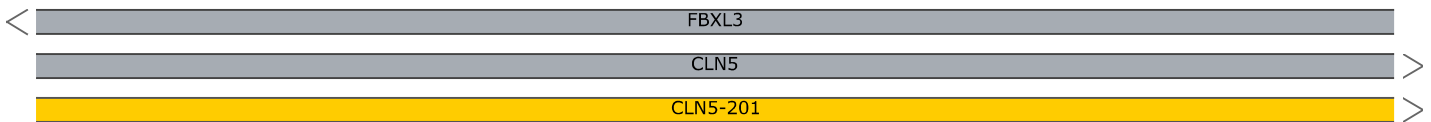
CTCAGGACTCTTCTTGTAAAGAAGCTGAAATTCGTACTATATTGGCCAAAGTGAGCGAGTTAGGTGATCTTGGTTTTCAATTTT  
GAGTCCTGAGAAGAGAACATTTCTTCGACTTTAAGCATGATATAACCGGTTTCACTCGCTCAATCCACTAGAACCAAAGTTAAAG

10,540



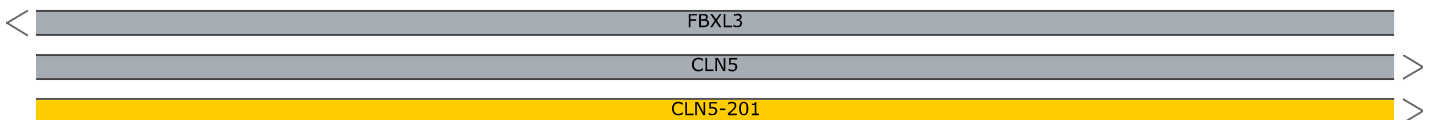
CGAGCCTTTGTTAATATGGAGAATTATGGTTCATATCAGTTATGTAGGACCTTTGGACCCAGGGTCTTACAGATAGATATGGTGT  
GCTCGGAAACAATTATACCTCTTAATACCAAGTATAGTCAATACATCCTGGAAACCTGGGTCCCAGGATGTCTATCTATAACCACA

10,625



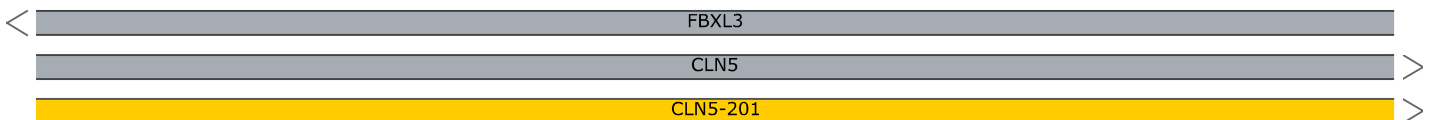
GCCCAGATTTTTAAAAATACCTTCAAAAATAAAAAATACATTCAGTGACATTTTCATGGTGGGAGCTCTTCTTTCTGATATGGCAG  
CGGGTCTAAAATTTTTATGGAAGTTTTTATTTTTTATGTAAGTCACTGTAAAAGTACCACCCTCGAGAAGAAAGACTATAACCGTC

10,710



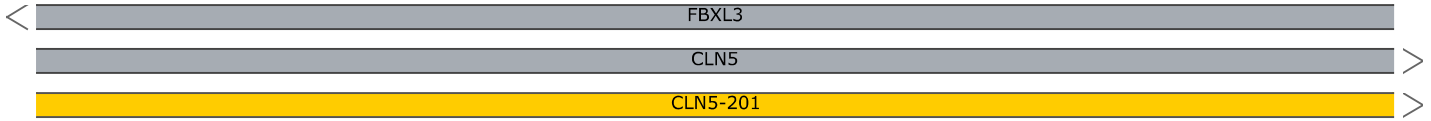
TTACACTTTTTCACTTAAGTGCTTTAGTTTAGACTAACTTTACAACCTTCTATAACTTTTTGGAACCAAGTTTTAGTATAGTCTGATT  
AATGTGAAAAAGTGAATTCACGAAATCAAATCTGATTGAAATGTTGAAGATATTGAAAACCTTGGTTCAAATCATATCAGACTAA

10,795



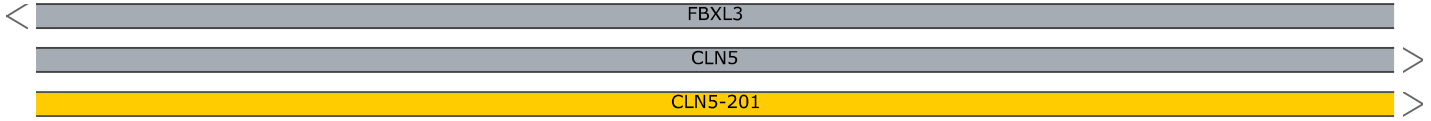
ACATTCCATTACCTAACTTTAGACATTCGTTTGTAGACACCATAACTGGAGTGATTGTGCTTCTAGATGTGGCAAATCCAGTGTTA  
TGTAAGGTAAGTGGATTGAAATCTGTAAGCAAATCTGTGGTATTGACCTCACTAACACGAAGATCTACACCGTTTTAGGTCACAAT

10,880



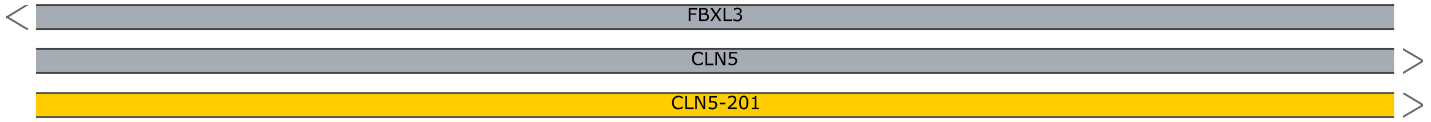
ACACATATTTCTGGCTGAGATTTTGGAACTAGCTAGTAACTGGCTTGTGTTCTTTAAGCATACTAACATCACTAAATCTTAGGAT  
TGTGTATAAAGACCGACTCTAAAACCTTGATCGATCATTGACCGAACACAAGAAATTCGTATGATTGTAGTGATTTAGAATCCTA

10,965



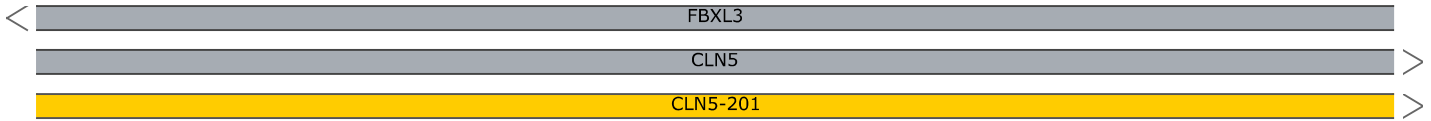
TTAGGATTGCTGTAAAGATGTAAGTTGTGTATGTTTGGCAGGTCACATTGAATGGCAGTGATAATGATTAATCAAAGAACAATG  
AATCCTAACGACATTTCTACATTTCAACACATACAAACCGTCCAGTGTAACCTACCCTCACTATTACTAATTAGTTTCTTGTTTAC

11,050



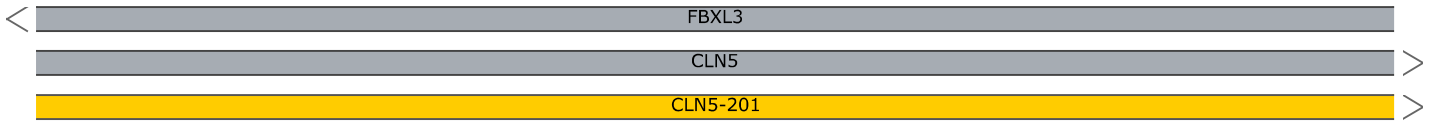
TCATCCTTGATCTTGCCTAATGTAGTTTATGTGCCAAACTTTCCAGGGTTTTGTAGTCACCTAGATTTTAAGCTGATAGCATAGT  
AGTAGGAAC TAGAACGGATTACATCAAATACACGGTTTGAAAGGTCCCAAACATCAGTGGATCTAAAATTCGACTATCGTATCA

11,135



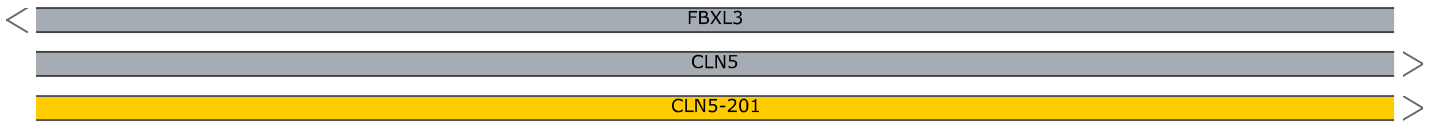
GCTTCAGCGGTTCTTCTAACCGGGGTATGCAGGAACATGGCTGCAGACACGTTTGGGTAAACAGGCACCTTCTGACTTCTTCATT  
CGAAGTCGCCAAGAAGATTGGCCCCATACGTCTTGTACCGACGTCTGTGCAAACCCATTTGTCCGTGGAAGACTGAAGAAGTAA

11,220



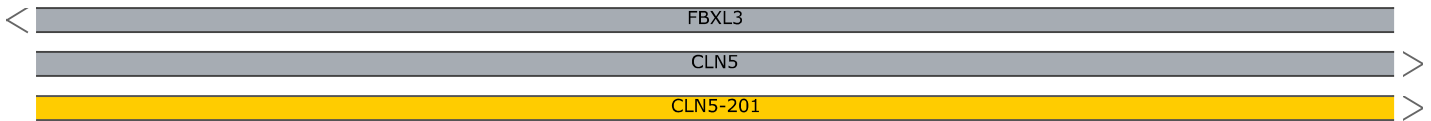
GTTTCCTGTAGTTCTCCCTCTTCCCACAAAGCTGTGACGCGCAGTGGAAAGAGGTTGCACCTTCTCCGAGAGAGGACAGGTTTCTGTT  
CAAAGGACATCAAGAGGGGAGAAGGGTGTTCGACAGTCGCGTCACCTTCTCCAACGTGAAGAGGCTCTCTCCTGTCCAAAGACAA

11,305



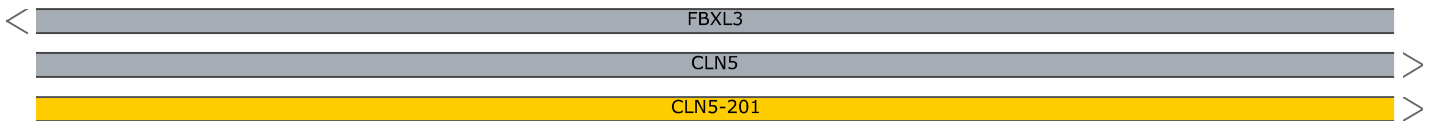
AAGATCACCAAGTAGCTGTGCTTTAATTAGAGCCAGACAAGCTTTCAAGGTCCTTTAAGTATTTGATGATCAACTGAACACGTTT  
TTCTAGTGGTTCATCGACACGAAATTAATCTCGGTCTGTTTCGAAAGTTCCAGGAAATTCATAAACTACTAGTTGACTTGTGCAAA

11,390



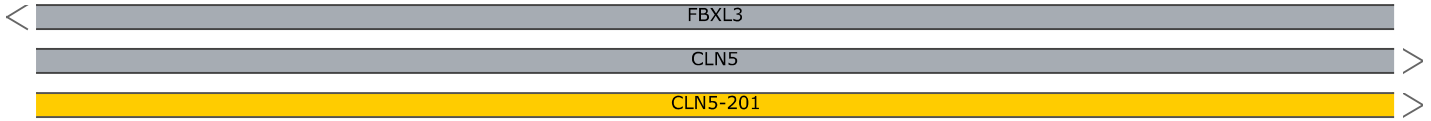
CTATTCAAGGAGAAAAACACCATTTCAGTAAGAAGATGGAGTAGATATCAGATAAAACAATTCACGTTTAAATATGTAAATGTACCAA  
GATAAGTTCCTCTTTTGTGGTAAGTCATTCTTCTACCTCATCTATAGTCTATTTTGTAAAGTGCAAATTATACATTTACATGGTT

11,475



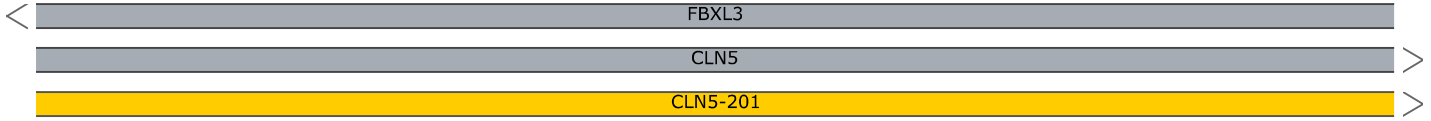
TTATGTTGATTTCAGTTTCAACTTTTCAAGTACTTCTCTGAGAGGTTAGTACATTATTATTGAGCTCTCACAGAAAAGCTTAATCATAGA  
AATACACTAAGTCAAAGTTGAAAAGTTCATGAAGGACTCTCCAATCATGTAATAATAAAGTCTGAGAGTGTCTTTTCGAATTAGTATCT

11,560



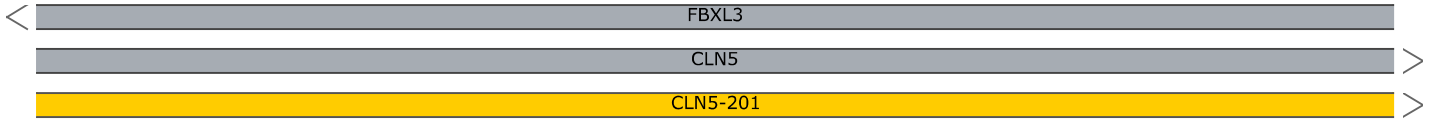
TATAATTAACCTGATCCAAATGAGTAAAGTGGACCTTAGAAAAGGCTAAGTGATCTTTCTCTGGCTATCCAGCTAGTAGTAATGAA  
ATATTAATTGGACTAGGTTTACTCATTTTACCTGGAATCTTTCCGATTCACTAGAAAAGAGACCGATAGGTCGATCATCATTACTT

11,645



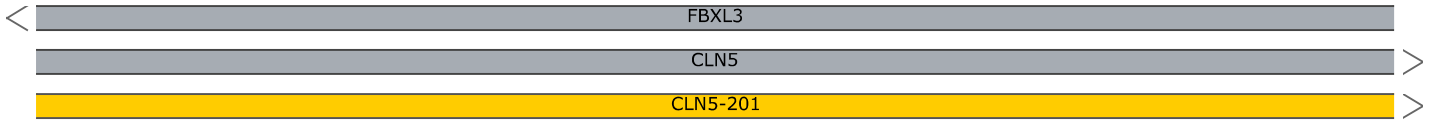
GTCAGGTCTTGAACCCCGGTTCTGCTGACTGAATTGGATGCACTATAGTACAGGCTTTTAGCACCGAAGTGTGGTCTCAGACCA  
CAGTCCAGAAGTTGGGGCCAAGACGACTGACTTAACCTACGTGATATCATGTCCGAAAATCGTGGCTTCACACCAGGAGTCTGGT

11,730



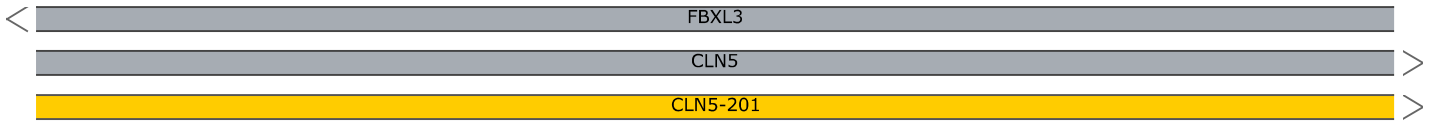
GTGCCTGCCAACCCAGATGTTACTGGTCTGTGAGGAAATAAGTACAGATACTGACAGGAAGCTTTTATAAACAATTTATTGGAGTG  
CACGGACGGTTGGTCTACAATGACCAGACACTCCTTTATTTCATGTCTATGACTGTCTTCGAAAATATTTGTTAAATAACCTCAC

11,815



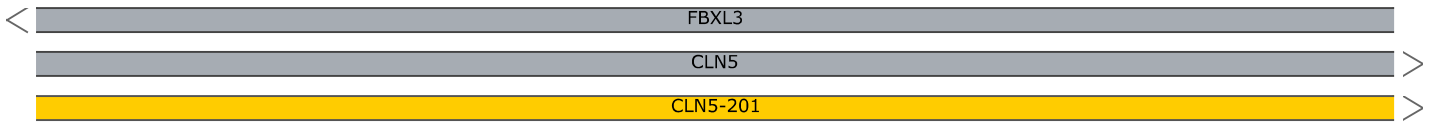
TTTTTGTCTTCTGTTGGGTCTAATTAATAAATAATGGAGCTTGTATTTTATGTGTCTTTGGTCTTATTTTGTCTAGGAATTCATTTT  
AAAAACAAGACAAACCCAGATTAATTTTTTTTAACTCGAACATAAAAATACACAGAAAACCAGAATAAAACAGATCCTTAAGTAAAA

11,900



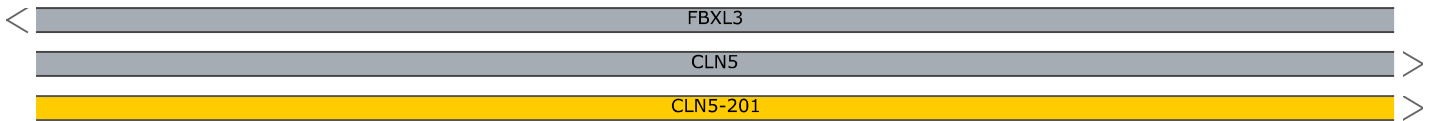
TGCTGGGTTTTTTTTTTTCAACTGTAGTCCCACAACAGTCTGAAAATAACCCAGTCAACCAGATATCTTCTCAAATACAGAGGGA  
ACGACCCAAAAAAAAGTTGACATCAGGGTGTGTCAGACTTTTATTGGGTGAGTGGTCTATAGAAGGAGTTTATGTCTCCCT

11,985



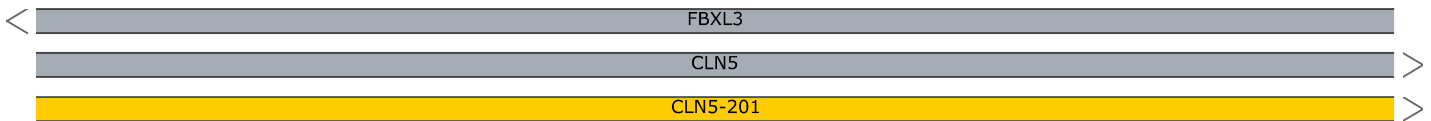
GAACTTTCTTTACGCCTCCTTTAGCCTGTCGACTCCTTATAATAATGCCTAAATATTCCAAATTAATACTGCCTCTTTAACCTG  
CTTGAAAAGAAAGTGCAGGAGGAAATCGGACAGCTGAGGAATATTATTACGGATTTATAAGGTTTAATTATGACGGAGAAATTGGAC

12,070



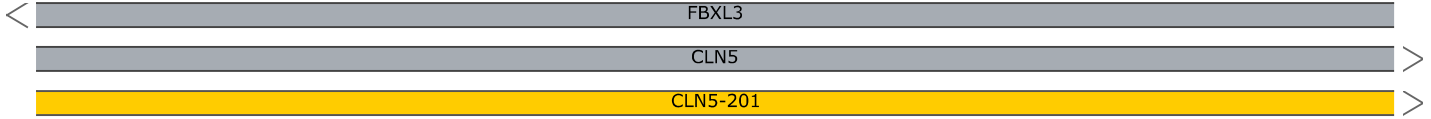
CTAATTGTTTTTACAATGTTACAAGAAAACCTTGGATCTGTGCATTATCACCATCTAGTGGCTAAACTCAGGCAACACGAACTTCT  
GATTAACAAAAGTGTACAATGTTCTTTTGAACCTAGACACGTAATAGTGGTAGATCACCGATTTGAGTCCGTTGTGCTTGAAGA

12,155



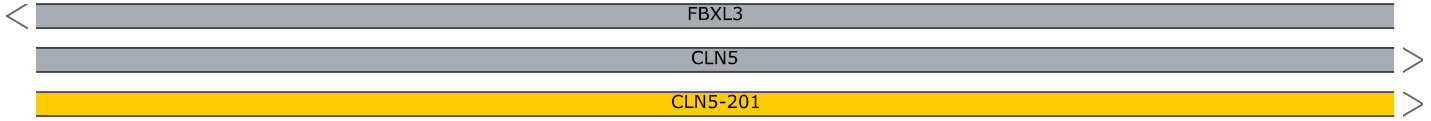
ACCAAAC TCAGGAAATTGCTCTGGAAAACTACAGGATTTTGGATTTCCAGA ACTGCCTTGAAGAGACAAAGATTCTTGTACCAA  
TGGTTTGAGTCCTTTAACGAGACCTTTTTGATGTCCTAAAACCTAAAGGTCTTGACGGAACTTCTCTGTTTCTAAGAACATGGTT

12,240



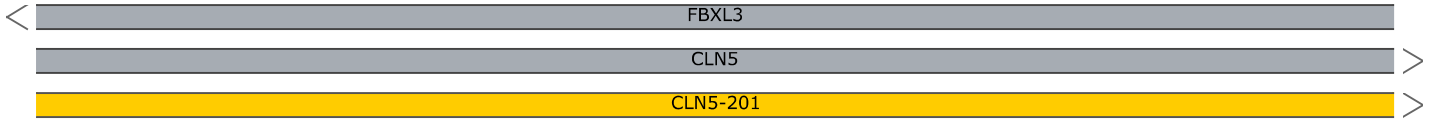
GTTTTGGTCAACTGCAAATCAAAGAACTTGGTTATGCAGGGAAAACAAATGAGGATATCTGTACCTGGAAC TTTTAAACAAGATT  
CAAAACCAGTTGACGTTTAGTTTCTTGAACCAATACGTCCCTTTTGT TTTACTCCTATAGACATGGACCTTGAAAATTTGTTCTAA

12,325



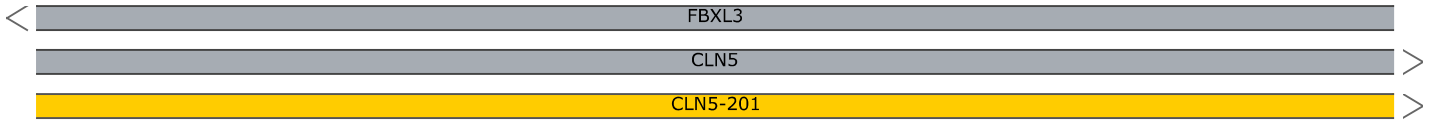
CTAATAGTTATGTGAAAAAAGCATTCAAGATTTTTGAGTAGGCACAGTGGCTTACGCCTGTAATCCTATCACTTTGCGAAACTGA  
GATTATCAATACACTTTTTTTCGTAAGTTCTAAAAACTCATCCGTGTCACCGAATGCGGACATTAGGATAGTGAAACGCTTTGACT

12,410



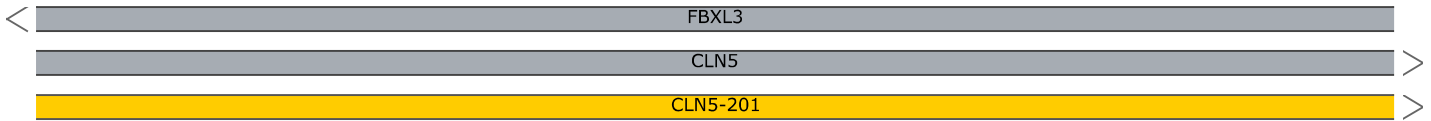
GGTGGTGAAGGATCACTGAAGGTCGGGAGTTCAAGACCAGCCTGGCCAATGTGGTGAAACCCCGTTTCTCCTAAAATTA AAAAA  
CCACCACCTTCTAGTGACTTCCAGCCCTCAAGTTCTGGTCGGACCGGTTACACC ACTTTGGGGCAAAGAGGATTTTAATTTTTT

12,495



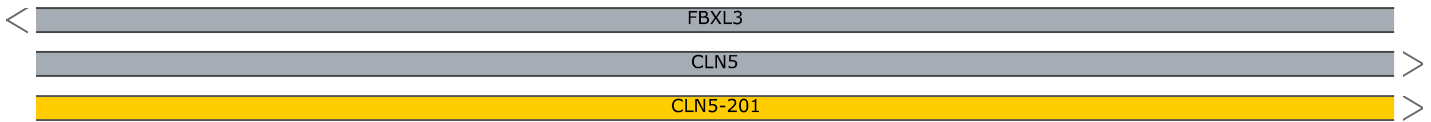
AAAAAAAAAAGCTAGGGGTGGTGGTCCATGCCTGTAATCCCAGCTACACGTGAGGCTAAGGCAGGAGAATCACTTGAACCCAGG  
TTTTTTTTTTTCGATCCCCACCACCAGGTACGGACATTAGGGTCGATGTGCACTCCGATTCCGTCCTCTTAGTGAACTTGGGTCC

12,580



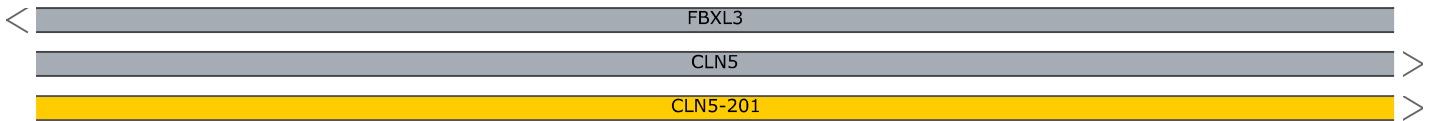
AGGCAGAGGTTGCAGTGAGCTGAGATGGCGCCACTGCACTCCAGCCTGGGCGACAGAGCGAGACTCCGTCTCAAAAAA AAGCAT  
TCCGTCTCCAACGTCCTGACTCGACTCTACCGCGGTGACGTGAGGTCGGACCCGCTGTCTCGCTCTGAGGCAGAGTTTTTTTTTCGTA

12,665



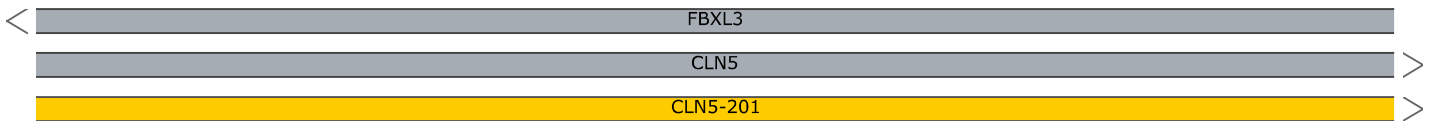
TCAAGATTTTTTCATTGTTCCCTAAGAATCTTAATTAATGAAGACAGAAAGCATCATAAAGTCAGGTA ACTACAGCACAGACAGCA  
AGTTCTAAAAAGTAACAAGGATTCCTTAGAATTAATTTACTTCTGTCTTTTCGTAGTATTTTCAGTCCATTGATGTCGTGTCTGTCTGT

12,750



TTAACATTTACAAAAGTATTTCTTAAGAATTA AACCTGTCAGCTCTACTTACAAGATGTAGAGCTTTTCAGGTGAAGATGATTCAA  
AATTGTAAATGTTTTTCATAAAGAATTCCTAATTTGGACAGTCGAGATGAATGTTCTACATCTCGAAAGTCCACTTCTACTAAGTT

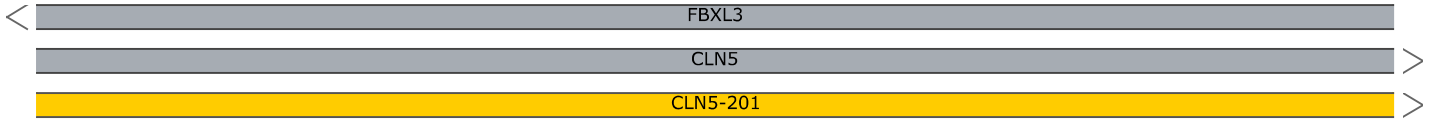
12,835





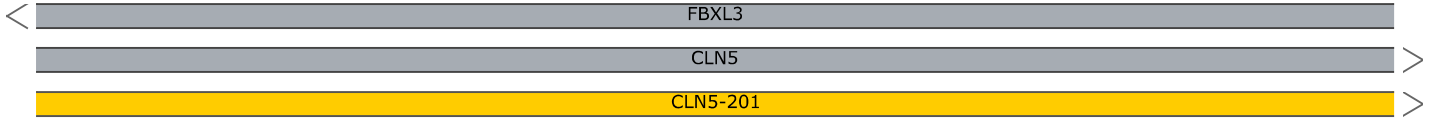
GAACATGCTTTTCAAAATAGTAGTTGAGAAACCAAAACATAGCCACGCAGAAATCTGCCAATTAAGTTTTGCTGCCCTTTGAGCAA  
CTTGTTACGAAAGTTTTATCATCAACTCTTTGGTTTTGTATCGGTGCGTCTTTAGACGGTTAATTCAAAACGACGGGAAACTCGTT

12,920



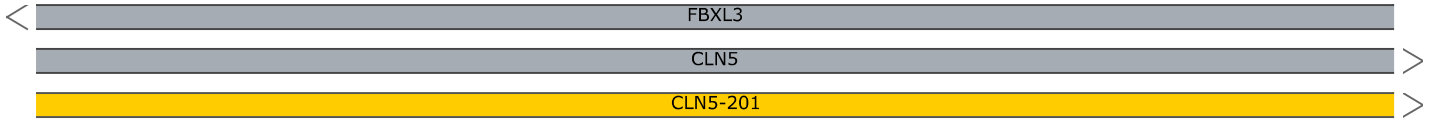
TATGACTTAATGTGATTTACTTTAATTATAACTTAAGTACAACCTAAATGCAGTTTCTATTTTTGCTATTGTTATAGATGTAGGCT  
ATACTGAATTACACTAAATGAAATTAATATTGAATTCATGTTGAATTTACGTCAAAGATAAAACGATAACAATATCTACATCCGA

13,005



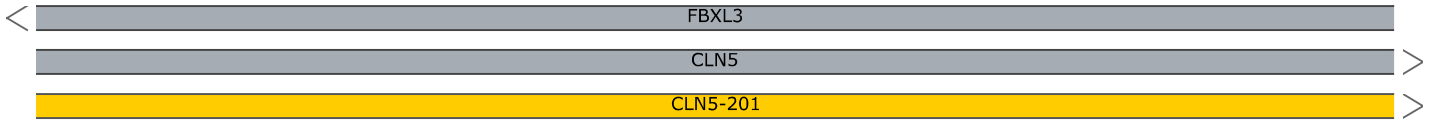
GGGTGCGGTGGCTTATGCCTGTAATCCTAACACATACTTTGGGAGGCCAAGGTGGACGGATCACTTGAGGTCAGGAGTTCGAGAC  
CCCACGCCACCGAATACGGACATTAGGATTGTGTATGAAACCTCCGGTTCACCTGCCTAGTGAACCTCCAGTCCCTCAAGCTCTG

13,090



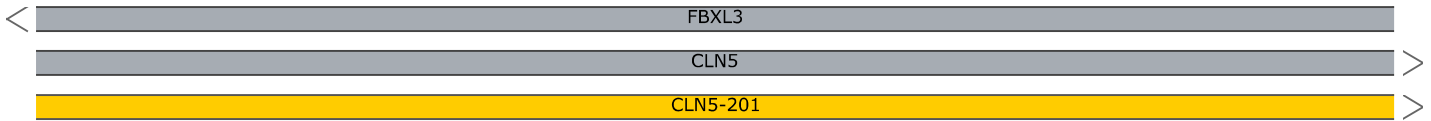
CAGCCTGGCCAACATGGTGAAACCCCGTCTCTACTGAAAATACAAAATTAGCTGGTTGTGGTGGAGCATGCCTGTAGTCCCAGC  
GTCGGACCGGTTGTACCACTTTGGGGCAGAGATGACTTTTATGTTTTAATCGACCAACACCACCTCGTACGGACATCAGGGTCG

13,175



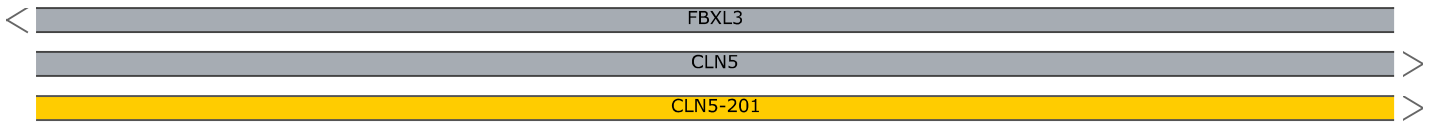
TACTTGGGAGGCTGAGGCAGGAGAATCACTTGAATCCAGGAGGTGGAGGTTCCCACGAGCCAAGATCGCACCACTGCACTCCAGC  
ATGAACCTCCGACTCCGTCTCTTAGTGAACCTTAGGTCCTCCACCTCCAAGGGTGCTCGGTTCTAGCGTGGTGACGTGAGGTCG

13,260



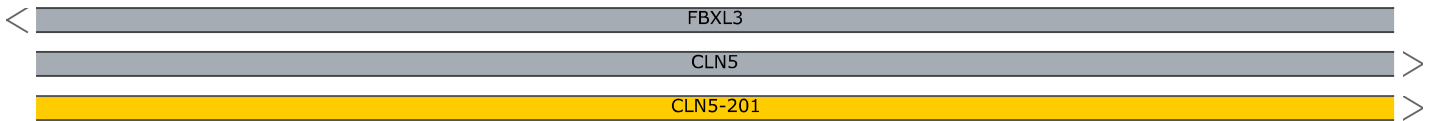
CTGGCAACAGAGTGAGACTCCGTCTCAAAAAATGTTGTAGATGTATAAAATTTATACATTTTTAGTCTGACTAGGGCTTTAGAG  
GACCGTTGTCTCACTCTGAGGCAGAGTTTTTTTACAACATCTACATATTTTAAATATGTAAAAATCAGACTGATCCCGAAATCTC

13,345



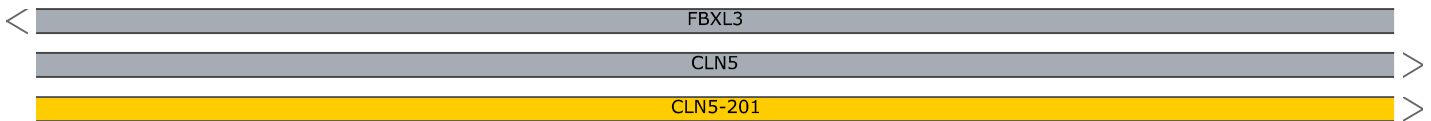
TGAATATATCTCCTCATTAATCTGGCACAAAATTAGTTAAGTAAGTATACCCACAAAAGTGTCATCTAATATATTGTTGCATGTAG  
ACTTATATAGAGGAGTAATTAGACCGTGTTTTAATCAATTCATTCATATGGGTGTTTTACAGTAGATTATATAACAACGTACATC

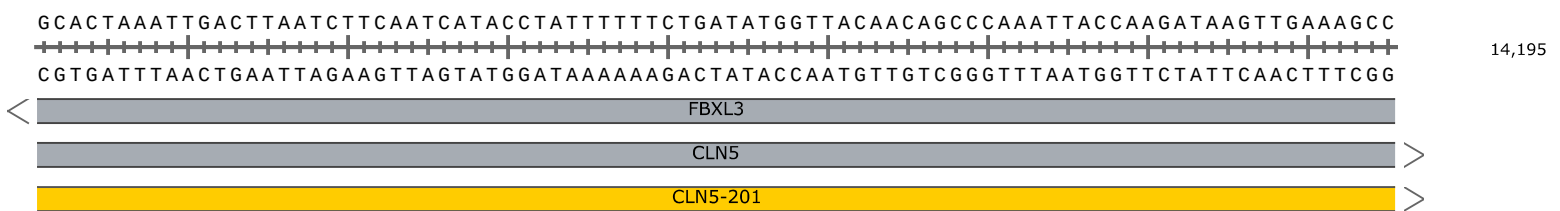
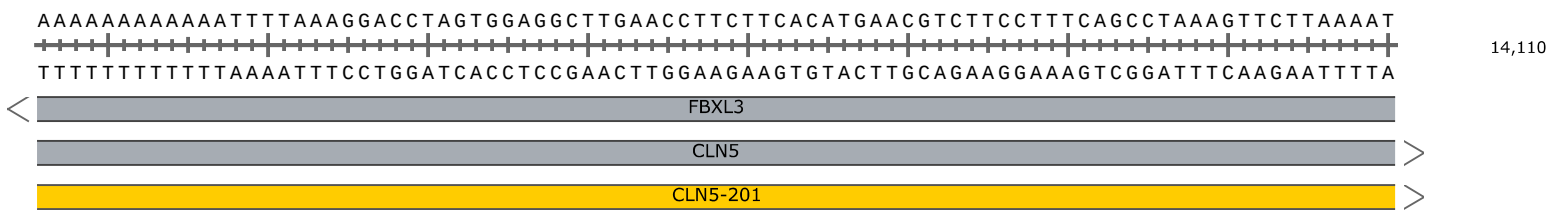
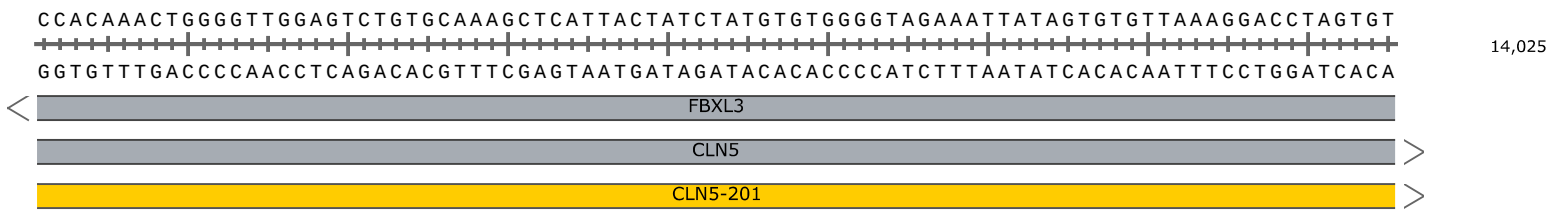
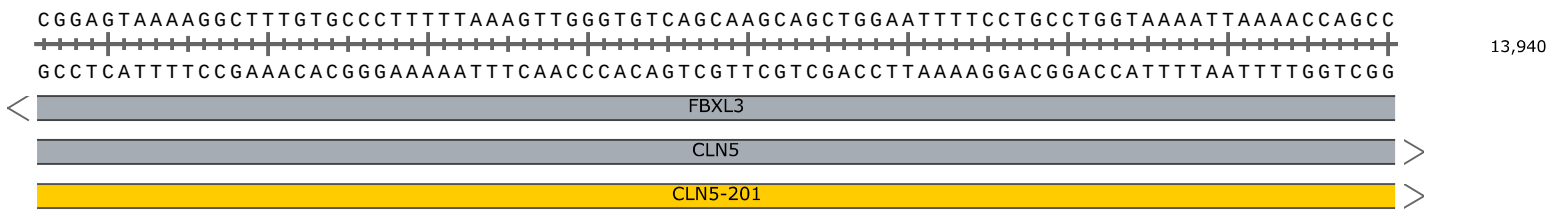
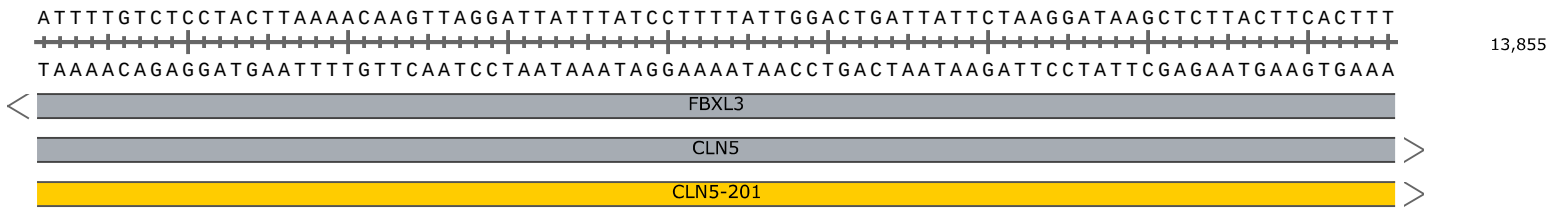
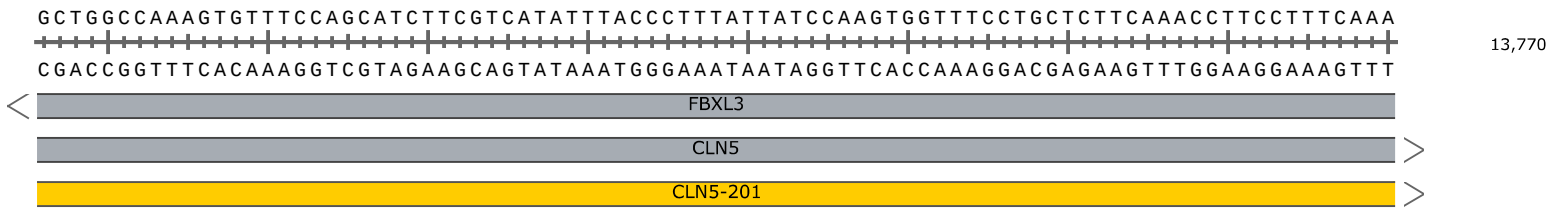
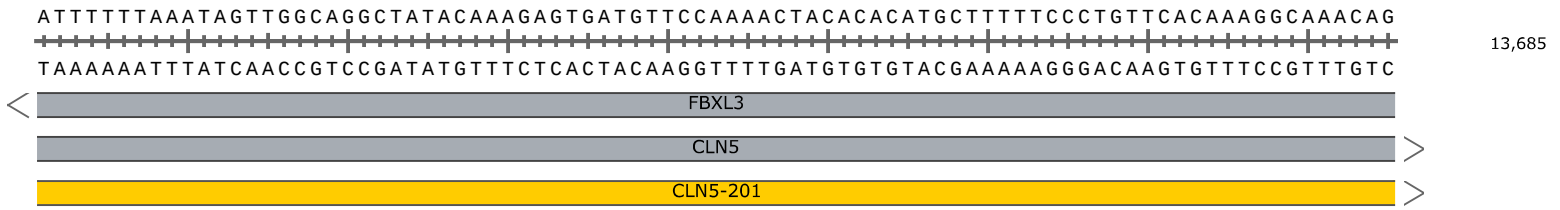
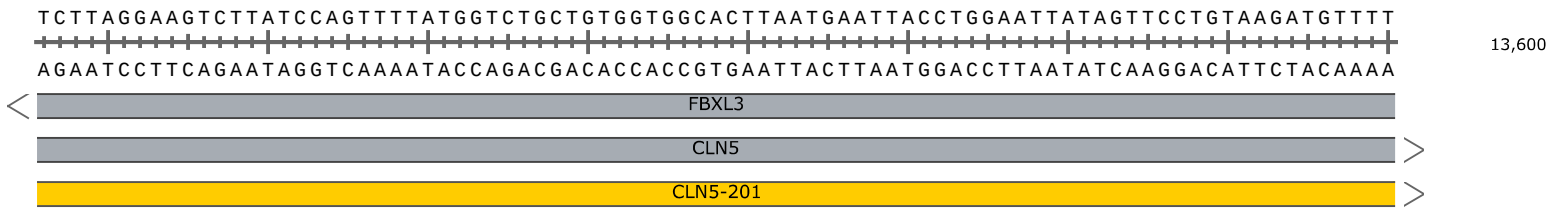
13,430



AGGAAAACACAGTGAAGAAACCTACTAACTTTATTTGGAACCTCAATATTGGTGGCTCCTTAAAAATTGGAGAAAAAATCAAG  
TCCTTTTGTGTCACTTCTTTGGATGATTGAAATAAACCTTGGGAGTTATAACCACCGAGGAATTTTAACTCTTTTTTTAGTTC

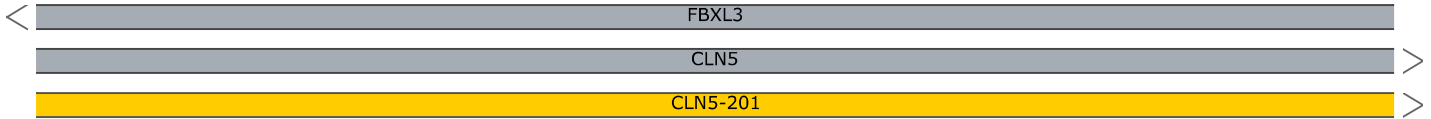
13,515





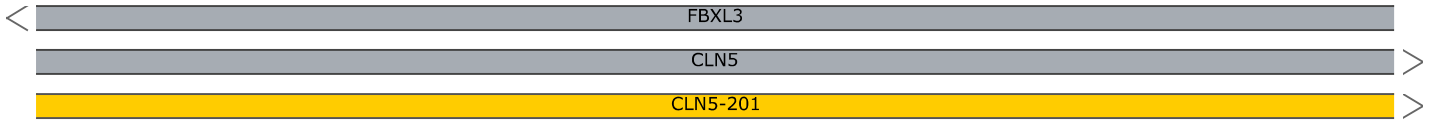
AGTAAAAACAATGAAAAATAATTTCAATAGTTGAAAAACTATTCTAATTTATATAAAGACATTTATCTCTAAAAAGACTGGTTGGGT  
TCATTTTGTACTTTTATTAAAGTTATCAACTTTTTGATAAGATTAAATATATTTTCTGTAAATAGAGATTTTTCTGACCAACCCA

14,280



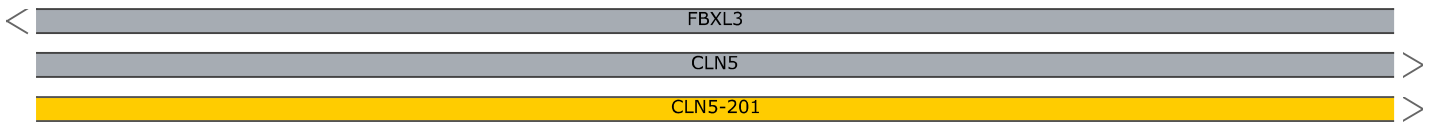
TCAAGGACCCTTAAAGACTGATTCTATGTCTAAATAATCTGTTTTATAAGTTCTCATTCTGAATGCAGAAAGAACCTATTATTTT  
AGTTCTGGAATTTCTGACTAAGATACAGATTTATTAGACAAAATATTCAAGAGTAAGACTTACGTCTTTCTTGATAATAAAA

14,365



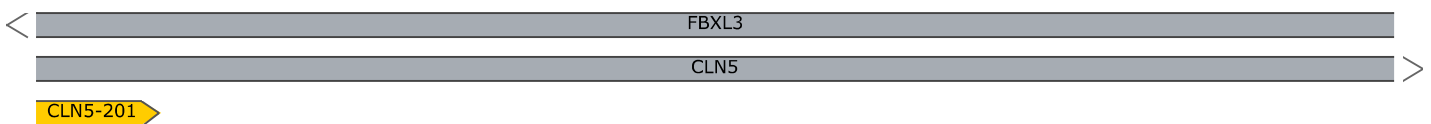
CTGTATAAAAAATTTAAAAATTTATATTTTCATGGTAGGTTTTAAATTTCTATTTCTTTAGGCATCAGAGCTTATTTCAAGAATAG  
GACATATTTTTAAATTTTTAAATATAAAGTACCATCCAAAATTTAAAGGATAAAGAAATCCGTAGTCTCGAATAAAGTTCTTATC

14,450



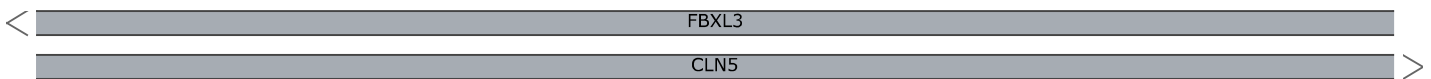
ATTCCATGAGCCTAACCTTGTATCTTCAAAAAGGCGAGTCTATCATAAACATTGTTTAAATATTAAATATTATATCCATCAAATAT  
TAAGGTACTCGGATTGGAACATAGAAGTTTTTCCGCTCAGATAGTATTTGTAACAAATTATAATTTATAATATAGGTAGTTTATA

14,535



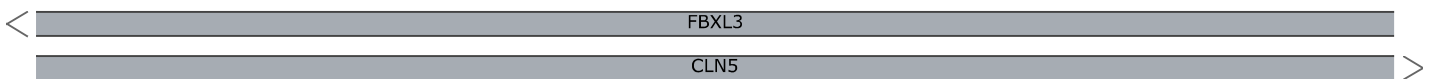
GGATTTGAAACATTTTTAAGTTTAAAGTCAAATGTTTGTGTAGTTTTTAAAAAGTAAAATACAACAGCATTAGTAACTTTTTATT  
CCTAAACTTTGTAAAAATTCAAATTTTCAAGTTTACAAAACATCAAAAATTTTTTCATTTTATGTTGTCGTAATCATTGAAAAATAA

14,620



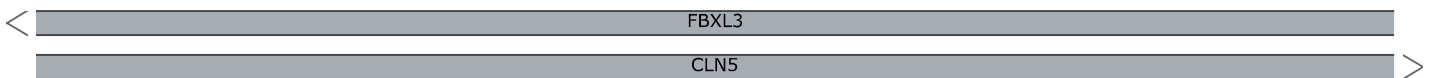
CTCAAAGTGATAAAAAGCATTTAACATATACTTTACAGTATAAACAAATTAAGTACTATGCATTTTTGCTTATAAAGTGACAAAAGTA  
GAGTTTCACTATTTTCGTAAATTGTATATGAAATGTCATATTTGTTTAAATTCATGATACGTA AACGAATTTTCACTGTTTCAT

14,705



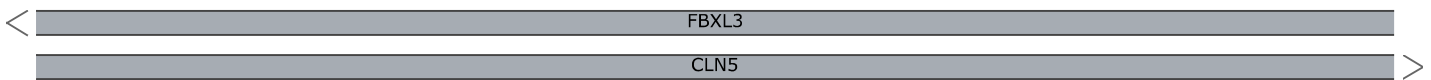
TTTTAAGCATTATATAAATTC AATTTGTACAAAAAGTAAATTTCCAAATACAAGCTTTGGTTAGTAGAACTGATTATGTACTGTCA  
AAAATTCGTAATATATTAAGTTAAACATGTTTTTCATTTAAAGGTTTATGTTTCGAAACCAATCATCTTGACTAATACATGACAGT

14,790



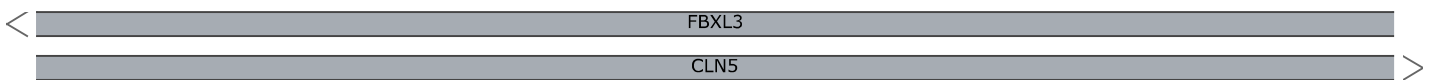
AATCCATTTTTCCAAAGTTGTTCAAGGAAAAACAACAACCTTGACTAGCACAGGTAATTCCTTGTACAATCAGAGCTTTTTACTATT  
TTAGGTAAAAAGGTTTCAACAAGTTCTTTTTGTTGTTGAACTGATCGTGCCATTAAGAACATGTTAGTCTCGAAAAATGATAA

14,875



TAGAAGGAGGGGATATATTACTATAATTGCTGTTAATTTTTCGAATCTAGATAAGCCTTTTTTCTTCTCATATGTTGCTGTAGGAG  
ATCTTCCTCCCCTATATAATGATATTAACGACAATTTAAAGCTTAGATCTATTCGGAAAAAAGAAGAGTATACAACGACATCCTC

14,960





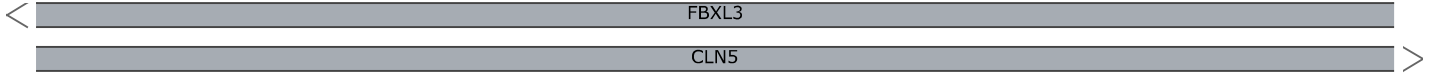






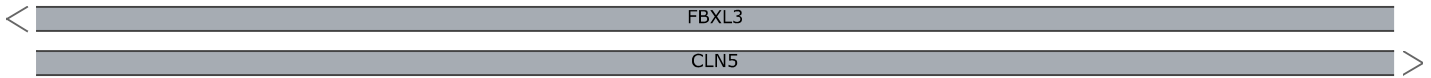
CCCACAAATAATTTTTAAAAATCTGGAAAAGTATTATTTTCTACTTTGAAGTGGAGACAGCTAGCTAAAAATAGCAAAGCTGCAATA  
GGGTGTTTATTAAAAATTTTAGACCTTTTTCATAATAAAGATGAAACTTCACCTCTGTGCGATCGATTTTTTATCGTTTTGACGTTAT

18,445



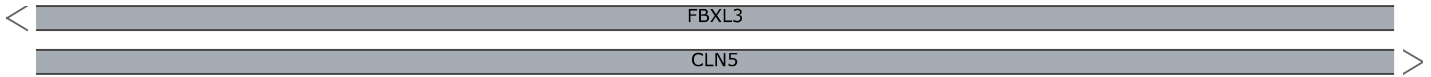
CAAACACAGGCTAAGTGACTCTTATGTCCATGCACTTAACTACTGCTTCAGAAATGACAAGACAGAGGCCACCAATAAGCCATAG  
GTTTGTGTCCGATTCACTGAGAATACAGGTACGTGAATTGATGACGAAGTCTTTACTGTTCTGTCTCCGGTGGTTATTCGGTATC

18,530



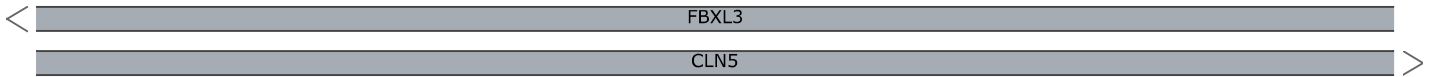
CTTTATAACAGTGGGAAAAGATAGGCATTAGAATTATCAGAAGAGATAAACTGAATTACCAGAATGAGTCACCAGAAAAGAGAGT  
GAAATATTGTCACCCTTTTCTATCCGTAATCTTAATAGTCTTCTCTATTTGACTTAATGGTCTTACTCAGTGGTCTTTTTCTCTCA

18,615



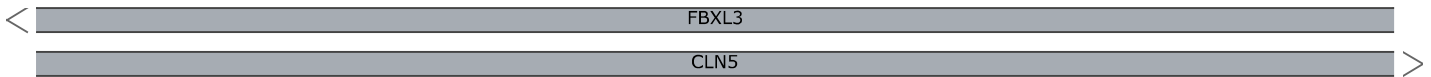
AATGTCTCAGTATTCAGCAACCACAAAAGTTTCTGTTTTCCGCAAAGTAGGTATATACTTTATTTTTGTTTTGAGATGGAGTCTCG  
TTACAGAGTCATAAGTCGTTGGTGTTCAAAAGACAAAAGGCGTTTCATCCATATATGAAATAAAAACAAAACCTCTACCTCAGAGC

18,700



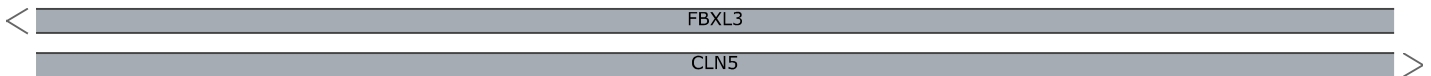
CTCTGCCACCCAGGATGGAGTACAGGGGTGTGATCTTGGCTCACTGCAACCTCCGCCTCCCTGGTTTTAAGCAATTCTCCTGCCTC  
GAGACGGTGGGTCCCTACCTCATGTCCCCACACTAGAACCAGGTGACGTTGGAGGCGGAGGGACCAAATTCGTTAAGAGGACGGAG

18,785



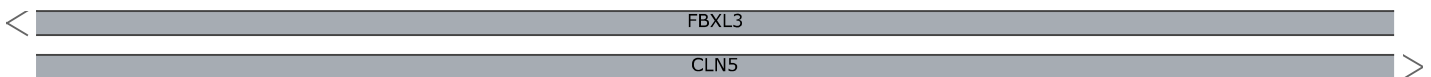
GGCCTACCAAGTAGCTGGGGTTACAGGCACACGCCACCACGCCCGGCTATTTTTATATACTTTGAAATATACTCTAATTACTCAAG  
CCGGATGGTTCATCGACCCCAATGTCCGTGTGCGGTGGTGC GGCCGATAAAAATATATGAAACTTTATATGAGATTAATGAGTTC

18,870



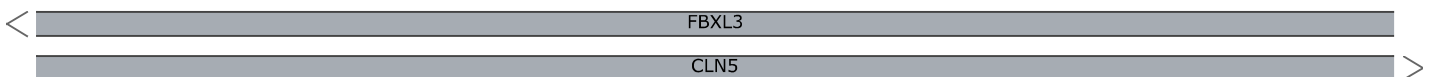
GTAACCTAAGCACATCTCCGTTCCGATACCATCTCACGCCAGTTAGAATGGCAATCATTAAAAAGTCAGCAAACAACAGATGCTG  
CATTGGATTTCGTGTAGAGGCAAGGCTATGGTAGAGTGCGGTCAATCTTACCGTTAGTAATTTTTCAGTCGTTTGTGTCTACGAC

18,955



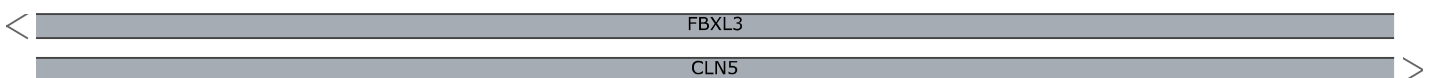
GAGAGGATATGGAGAAAATAGGAACGCTATTACAGTTAGCGGCAGTGTAATTAGTTCAACCATTGTGGAAGACAGTGTGGCAATT  
CTCTCCTATACCTCTTTATCCTTGCGATAATGTCAATCGCCGTACATTTAATCAAGTTGGTAACACCTTCTGTACACCCGTTAA

19,040



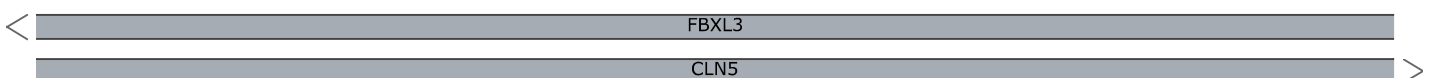
CCTTAAGGATCTAGAACTAGAAAATACCATTTGACCCAGCAATACCATTACTGGGTATATACCCAAAAGGATTATAAATCATTCTAC  
GGAATTCCTAGATCTTGATCTTTATGGTAAACTGGGTCGTTATGGTAATGACCCATATATGGGTTTTCTAATATTTAGTAAGATG

19,125



TATAAAGACACATGCCCATGTATGTTTTACTGTGGCACTGTTACAATAGCAAAGACTTGGAAACCAACCCAAATGCCCATCAATGA  
ATATTTCTGTGTACGGGTACATACAAAATGACACCGTGACAAGTGTATCGTTTCTGAACCTTGGTTGGGTTTACGGGTAGTTACT

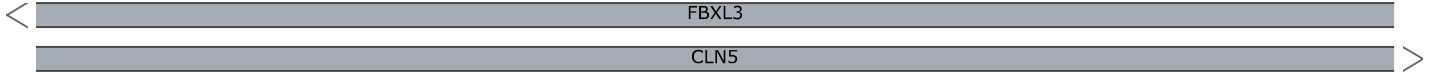
19,210





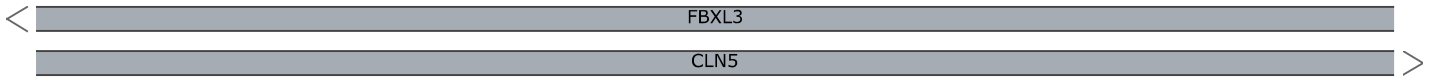
TAGACTAAAGAAAAGAAAACATGGCACATATGCACCATGGAATACTATGCAGCCATAAAAAAGGGATGAGTTCATGTCCTTTGCAGG  
ATCTGATTTCTTTCTTTTGTACCGTGTATACGTGGTACCTTATGATACGTCGGTATTTTTCCCTACTCAAGTACAGGAAACGTCC

19,295



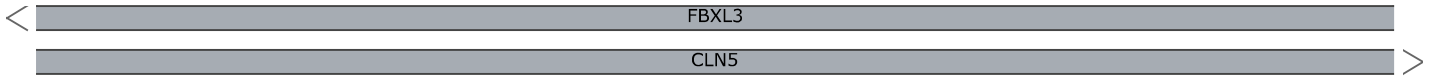
GACATGGATGAAGCTGGAAACCATCATTCTCAGCAAACCTAACACAAGAACAGAAAACCAGACACCGCATGTTCTCACTCATAAGC  
CTGTACCTACTTCGACCTTTGGTAGTAAGAGTCGTTTGATTGTGTTCTTGTCTTTGGTCTGTGGCGTACAAGAGTGAGTATTCG

19,380



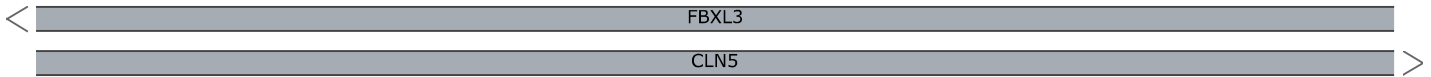
GAGAGTTGAACAATGAGAACACATGGACACCGGGAGGGGAACCTCACACGCTGGTGCCTGTGCGGGAGTTGGGGGGCTAGGGGAGG  
CTCTCAACTTGTTACTCTTGTGTACCTGTGGCCCTCCCTTGGAGTGTGCGACCACGGACAGCCCTCAACCCCGCATCCCTCC

19,465



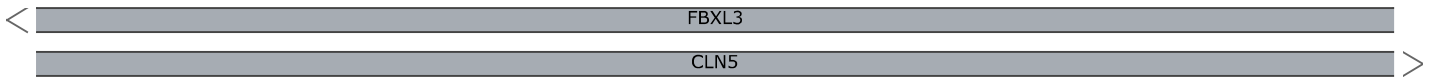
AATAGCATTAGGAGAAAATACCTAATGTAGATGACAGGTTGATGGGTGCAGCAAACCACCGTGGCACGTGTATATCTATGTAACAA  
TTATCGTAATCCTCTTTATGGATTACATCTACTGTCCAACCTACCCACGTCGTTTGGTGGCACCGTGCACATATAGATACATTGTT

19,550



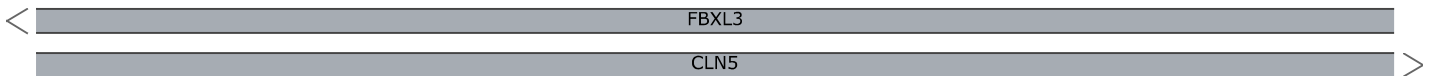
ACCTGCATGTTCTGCACATGTACTIONCAGAACTTAAAGTATAATAATAATTAACAAAAACACACAGACATGGGAAATGGTAGCTA  
TGGACGTACAAGACGTGTACATGAGGTCTTGAATTTTCATATTATTATTAATTTTTTTTTTGTGTGTCTGTACCCTTTACCATCGAT

19,635



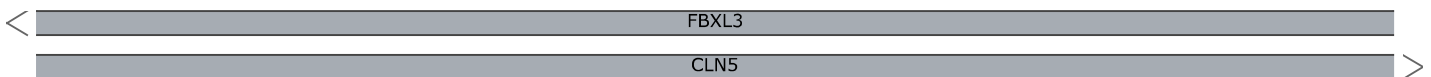
ACCATTCAAATGAAAAGAACTGTGGAGTATCATTTAATAACTACAAAAGCAGTTGTGGCAGGCGTAATTCTCAAATGGCCTCCA  
TGGTAAGTTTACTTTCTTTGACACCTCATAGTAAATTATTGATGTTTTTCGTCAACACCGTCCGCATTAAGAGTTTTACCAGGAGGT

19,720



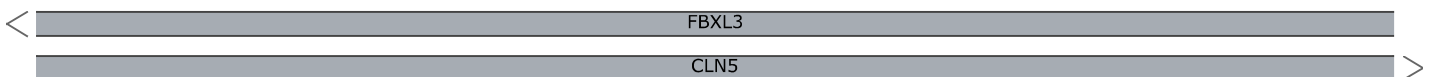
AGATCCACACCCCTAATGCCTAGCATCTGTGAATTCCATAAGATATCATGCCCATGATTATGATATATGGTACAGCTGAGCATAT  
TCTAGGGTGTGGGATTACGGATCGTAGACACTTAAGGTATTCTATAGTACGGGTACTAATACTATATACCATGTGCGACTCGTATA

19,805



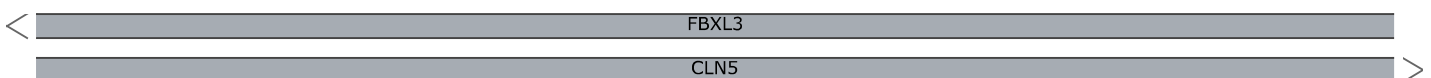
AAAAGATTATCTGGATGGTCCTAGTCTAATCATATGAGCCCCTTTTAAAGCAGTTTCTCTGGCTGATTGCAGAAGAGGAAAGTCA  
TTTTCTAATAGACCTACCAGGATCAGATTAGTATACTCGGGGAAAATTCGTCAAAGGAGACCGACTAACGTCTTCTCCTTCAGT

19,890



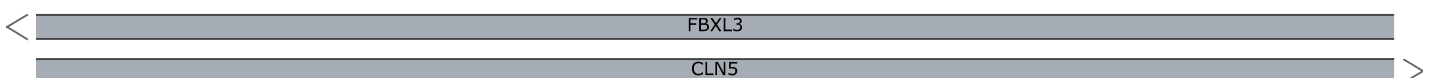
GAGAGATTCAAAATGCAAAGGGGACTCAATGTGTTATTGCTGGCTCTAAGCTAGAGGGGGCCAAAAAGAAAAATCACAACCAGC  
CTCTCTAAGTTTTACGTTTTCCCTGAGTTACACAATAACGACCGAGATTCGATCTCCCCGGTTTTTTTTCTTTTTAGTGTTGGTTCG

19,975



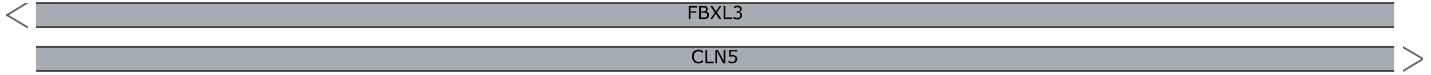
CTCTAAGAGCAGAAAAGACCCCTAACAGCCTCCTGCTGACAGCCAATAAGGAAACTGGATGTCAGTCCAACAATCACAAGGAACT  
GAGATTCTCGTCTTTCTGGGGGATTGTGCGGAGGACGACTGTCGGTTATTCTTTGACCTACAGTCAGGTTGTTAGTGTTCTTGA

20,060



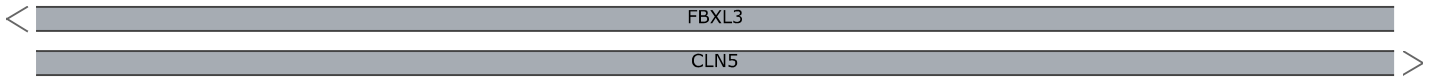
AAATTCAGCCAATAAATTGAATGAGCGTGGAGGTGGATTCTTCTGCGAGGCCTCCAGGTAAGAGGCCAGCCTTCTGACATTTTC  
TTTAAGTCGGTTATTGAACTTACTCGCACCTCCACCTAAGAAGACGTCTCGGAGGTCCATTCTCGGGTCGGAAGGACTGTAAAAG

20,145



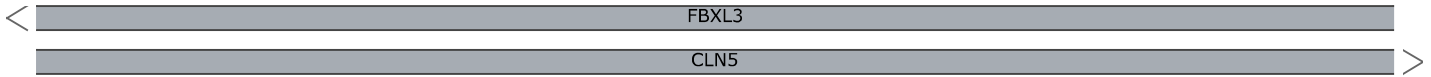
CTCTCAGCCTTTTAAGATTTTAAGCAGAGAAGCCACTTGAGCCCTAACTACAGCTCTAATGTACAGAACAGTGGAGCAAATAAAT  
GAGAGTCGGAAAATTCTAAAATTCGTCTCTTCGGTGAACCTCGGGATTGATGTGCGAGATTACATGTCTTGTACACCTCGTTTATTTA

20,230



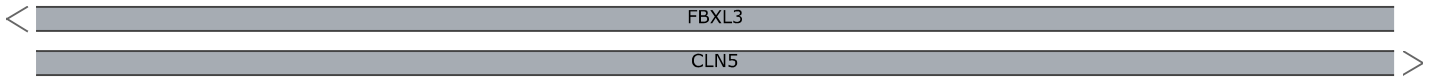
GGGTGTTGGTTTAAGCTGCTTTGTGTATAGCTGTGTCAGTTATGTACCAGTAAGAACATAGTTCCAAGTATTTAAAAACATAACACA  
CCCACAACCAAATTCGACGAAACACATATCGACAGTCAATACATGGTCAATTCTTGTATCAAGGTTTCATAAATTTTTGTATTGTGT

20,315



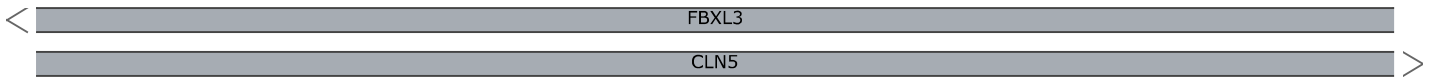
GTGACAAAAGTAAAAATAAACTAGGGCACTATTACGACTCAATAAATTAAGACAAAATAACCCAAATTAGAAAAATAGGCAAAGGGG  
CACTGTTTTTCATTTTATTTTATGATCCCGTGATAATGCTGAGTTATTTAATTCTGTTTTATTGGGTTTAATCTTTTATCCGTTTCCCC

20,400



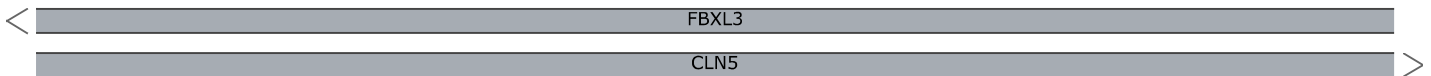
CTGGGTGCAGTGGCTTACACCTGTAATCCAGCACTTTGGGAGGCCAAAGCGGACGGATTGCCTGAGGTCAGAAAGTTCGCGACCA  
GACCCACGTACCCGAATGTGGACATTAGGGTCGTGAAACCTCCGGTTTTCGCCTGCCTAACGGACTCCAGTCTTCAAGCGCTGGT

20,485



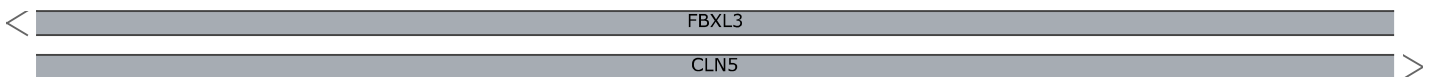
GCCTGGCCAACACGGTGAAACCCCATCTCTACTAAAAATACAAAATTAGCCGGATGTGGTGGCGGGCACCTGTAATCCCAGCTA  
CGGACCGGTTGTGCCACTTTGGGGTAGAGATGATTTTTATGTTTTAATCGGCCTACACCACCGCCCGTGGACATTAGGGTCGAT

20,570



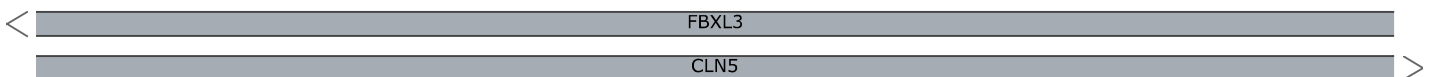
CTCAGGAGGCTGAGGCAGGAGAATCACCTGAACCCGGGAGGCGGAGGTTGCAGTGAGCCGAGATCAATGCCACTGCACTCTCCAG  
GAGTCCCTCCGACTCCGTCTTCTTAGTGGACTTGGGCCCTCCGCCTCCAACGTCACTCGGCTCTAGTTACGGTGACGTGAGAGGTC

20,655



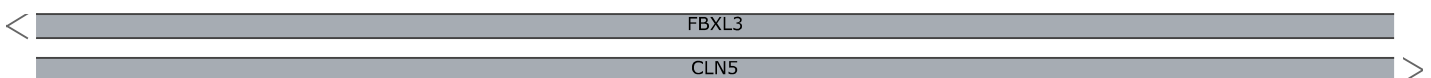
CCTGGGCAACAAGAAGGAGACTTTGTCTCCAAAAAAAAAAAAAAAAAAAAAAAAATAGGCAAAGGATCTGAATAGACATTTCTCCAAAGAAG  
GGACCCGTTGTTCTTCTCTGAAACAGAGGTTTTTTTTTTTTTTTTTATCCGTTTCTAGACTTATCTGTAAGAGGTTTTCTTC

20,740



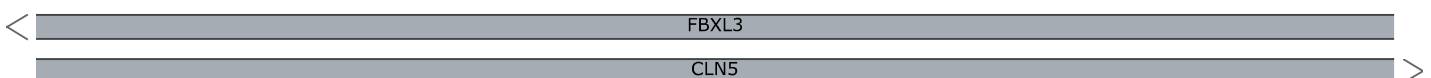
ATATACAAATGGCCAAGAAGCACCATGAAAAGACAGTCAAGGTCAGGCACGGTGGCTCTCGCCTATAATCCCAGCACTTTGGGAA  
TATATGTTTACCGGTTCTTCTGTTGACTTTTTCTGTGAGTTCCAGTCCGTGCCACCGAGAGCGGATATTAGGGTCGTGAAACCTT

20,825



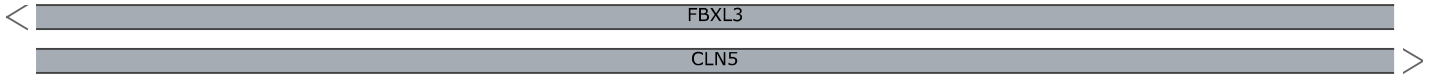
GCTGAGGTGGGAGGAACACTTGAGCCCATGAGTTTCGAGACTAGCCTAGGCAACCAGGCAAAACCCCATCTCTACAAAAATTACAA  
CGACTCCACCCTCCTTGTGAACTCGGGTACTCAAGCTCTGATCGGATCCGTTGGTCCGTTTTGGGGTAGAGATGTTTTTAATGTT

20,910



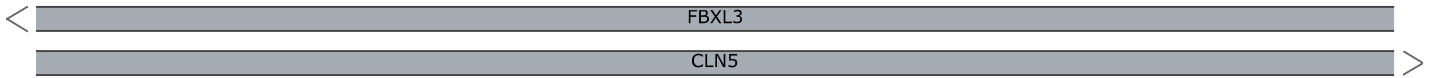
AGTATTAGCCGGGCATAATGGCGTATGCCTGTGGTCCCAGCTACTTGGGAGGCTGAGGTGAGAAGATCGTTTAAGCCCAGGAGGT  
TCATAATCGGCCCGTATTACCGCATACGGACACCAGGGTCGATGAACCCCTCCGACTCCACTCTTCTAGCAAATTCGGGTCTCCA

20,995



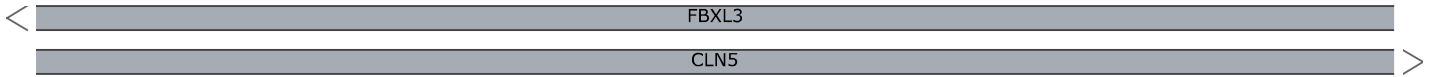
CCGACTGCAGTAAGCCAGGATCACGCCACTCCACTCCAGCCTGGGCGACAGAGTGAGACCCTGTCTCAAAAAAAAAAAAAAAAAA  
GGTCTGACGTCATTTCGGTCCTAGTGCGGTGAGGTGAGGTGCGACCCGCTGTCTCACTCTGGGACAGAGTTTTTTTTTTTTTTTT

21,080



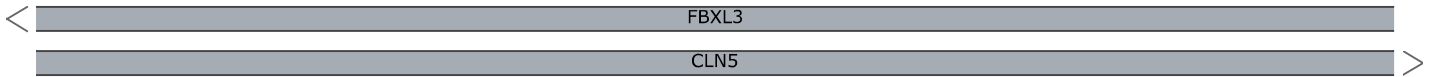
AGATACTCAACATCATTAGTCAACAAGAAAAATGTAATCAAAACCACAATGAGTTTACACCCCTAGCATGGCTATAATCAAAAA  
TCTATGAGTTGTAGTAATCAGTTGTTCTTTTACATTTAGTTTTGGTGTTACTCAAATGTGGGGGATCGTACCGATATTAGTTTTT

21,165



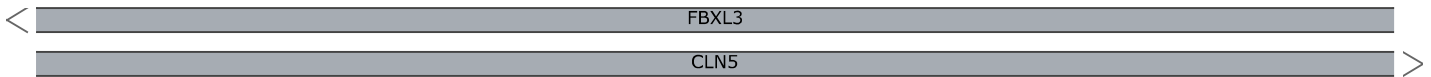
GACAAATAAGTGTTAGAAGACACTGCTAGTGGCTATGTAAGTGGTACACAGCAGCTTTGGAAAAACAGCCTGGCATTACCTCAAA  
CTGTTTATTCACAATCTTCTGTGACGATCACCGATACATTTACCATGTGTGTCGTCGAAACCTTTTGTGCGACCGTAATGGAGTTT

21,250



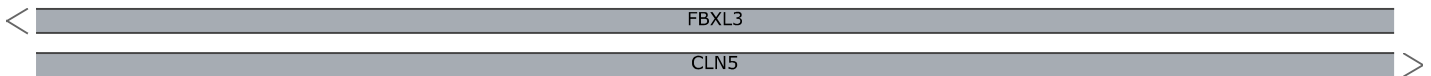
TGGGGAGTATGATCACTAGGTATGTACCTAAGAGAAATTAACCATATGTCCGCACAAAAATTTGTACATAAATGTGCACAGCAGC  
ACCCCTCATACTAGTGATCCATACATGGATTCTCTTTAATTTGGTATACAGGCGTGTTTTAAACATGTATTTACACGTGTGTCGCG

21,335



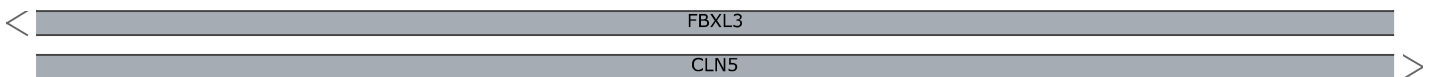
ATTATTCATAAGTCAAAAAGGTAGATTTCCATTTATATGAAATGTCCAGAACAGGCAAATCTACAGAGACAGAAAAATAGATTAGTG  
TAATAAGTATTCAGTTTTCCATCTAAAAGGTAAATATACTTTACAGGTCTTGTCCGTTTAGATGTCTCTGTCTTTTATCTAATCAC

21,420



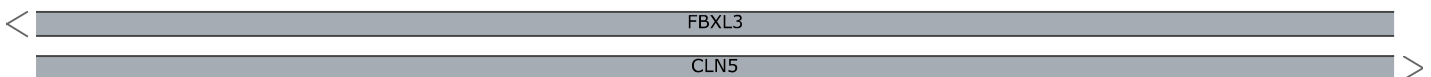
GTTGTTGAGGGATGGCTGGGATGGAGGTTTTGGGGCAACAGCTAAGAGGTATGTGGTTTCTTTTTAGAATAATAAAGCATTCT  
CAACAACCTCCCTACCGACCCTACCTCCAAAACCCCGTTGTGCGATTCTCCATACACCAAAGAAAAATCTTATTATTTTCGTAAGA

21,505



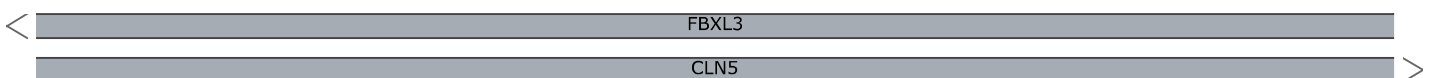
AAAATTGTGGTGATGCATGCACTACTCTACCAATACACTAAAAATCAATAAATTGTACATTTTTAAATGAGAATTGTGAATTATAT  
TTTTAACACCACTACGTACGTGATGAGATGGTTATGTGATTTTTAGTTATTTAACATGTAAAATTTACTCTTAACACTTAATATA

21,590



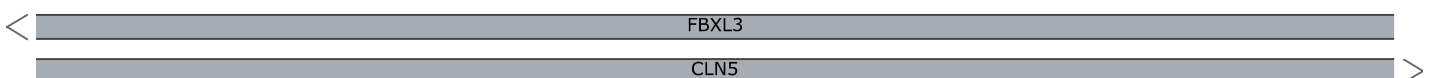
GCCAATAAAGCTGTTAAAAAATTGGTGATTAGTGGTGGTACTATAAATTCATACAACCTCATTTGGAAAAAAAAAATATGGCAAAA  
CGGTTATTTTCGACAATTTTTTAACCACTAATCACCACCATGATATTTAAGTATGTTGAGTAAACCTTTTTTTTTTATACCGTTTTT

21,675



AGCACAAAGACCTTTGTCTTAGGACTTCCACTTCTTAAGAATGTACCCTAAGGAAGAAATTAATACAAGCAAACCTGCTATAAGCC  
TCGTGTTTCTGGAAACAGGATCCTGAAGGTGAAGAATCTTACATGGGATTCCTTCTTTAATTATGTTTCGTTTGACGATATTCGG

21,760



AATTTTTTTTTTAAATCACAGCAAAAAAGGTAAAAACAAGTGTCCAACCTTTAGAACTATAATGCAATGTTGGCTTTATAGGGAAC T 21,845  
TTAAAAAAAATTAGTGTCGTTTTTTCCATTTTTGTTTCACAGGTTGAAATCTTGATATTACGTTACAACCGAAATATCCCTTGA  
< FBXL3 >  
CLN5 >

AAGTAACTAAATGTTTCATTAGTTCAACCTGATAATTAATATTAAGGAAGCAACAGGCAAACCTAACCTAGAGGTCCAGTTACAGAC 21,930  
TTCATTGATTTACAAGTAATCAAGTTGGACTATTAATTATAATTCCTTCGTTGTCCGTTTGATTGGATCTCCAGGTCAATGTCTG  
< FBXL3 >  
CLN5 >

AATTATAACAACCTATAGGAAATGAAAGAAAATTGATTAATGTTTCAGTGAGGAAAGTAGAATACAGTCCCTAATTTCAACTTAGA 22,015  
TTAATATTGTTGATATCCTTTACTTTCTTTTAACTAATTTACAAGTCACTCCTTTTCATCTTATGTCAGGGATTAAAGTTGAATCT  
< FBXL3 >  
CLN5 >

GAAACTGTCCAAATATGCAAAAAGATAGATAGAAAAATGAAAAATGAAATTTCAACTGAAATCTTATGTGGTTATGCTCTTCAA 22,100  
CTTTGACAGGTTTATACGTTTTCTATCTATCTTTTATACTTTTATACTTTTAAAGTTGACTTTAGAATACACCAATACGAGAAGTT  
< FBXL3 >  
CLN5 >

ATAGAAAATATTACAAGTGTCTTTCTTTTTTTGAGACAGAGTCTCGCTCTGTTGCCAGGCTGGAGCACAGTGGTGCGACCTCG 22,185  
TATCTTTTATAATGTTTCACAAGAAAAGAAAAAACTCTGTCTCAGAGCGAGACAACGGTCCGACCTCGTGTCAACCACGCTGGAGC  
< FBXL3 >  
CLN5 >

GCTCACTGCAACCTCCGCCTCCCGGATTCAAACGATTTTTCTGCCTCAGCCTCCCAAGTAGCTGGGACTACAGGCGTGCACCACC 22,270  
CGAGTGACGTTGGAGGCGGAGGGCCTAAGTTTGCTAAAAGGACGGAGTGGAGGGTTCATCGACCCTGATGTCCGCACGTGGTGG  
< FBXL3 >  
CLN5 >

ATGCCAGCTAATTTTTGTATTTTTAGTAGAGACGGGCTTTACCATGTTGGCCAGGATGGTCTGGATCTCTTGACCTCGTGATC 22,355  
TACGGGTCGATTAAAAACATAAAAAATCATCTCTGCCCGAAAAGTGGTACAACCGGTCTACCAGACCTAGAGAAGTGGAGCACTAG  
< FBXL3 >  
CLN5 >

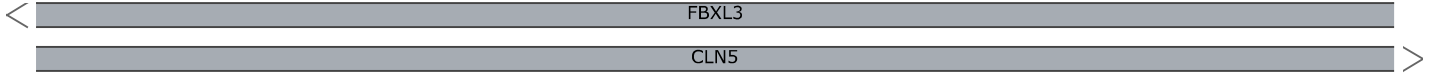
TGCCTGCCTCGGCCTCCCAAAGTGCTGGGATTAACAGACGTGAGCCAACGTGCCAGCTGTATTA AAAAGTATTCTTTCTTTCC 22,440  
ACGGACGGAGCCGGAGGGTTTTACGACCCTAATTGTCTGCACTCGGTTGCACGGGTGCACATAATTTTTTATAAGAAAGAGAAGG  
< FBXL3 >  
CLN5 >

CTTCCCTTCTGAAGAAGTCCAAAAGTCATTATGAAACCAACTTTGCAAAATTATGACCGTGAAAGAAATCAGACCTAACCG 22,525  
GAAGGGAAGGACTTCTTGATCAGGTTTTTCAAGTAATACTTTGGTTGAAACGTTTTTAATACTGGCACTTTCTTTAGTCTGGATTGGC  
< FBXL3 >  
CLN5 >

ACCCTATCTTGCTTCTAACCTTAAGCTGCCCTGGTTCAATTCCTGGGCATAGGCCGAATTAACCTTTGGGAAGGAATTCGGTTTAC 22,610  
TGGGATAGAACGAAGATTGGGAATTCGACGGGACCAAGTAAGGACCCGTATCCGGCTTAATTGAAACCTTCTTTAAGCCAAGTG  
< FBXL3 >  
CLN5 >

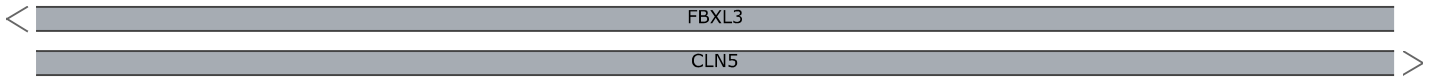
GGTTTGACTCTGAAACAAAACCTGGTAACCGCCGTTTCACAAAAAGACCCCTCCTTCTTGCCGGGGTCCAGTCTGCCTTTGCAGGA  
-----  
CCAAACTGAGACTTTGTTTTGACCATTGGCGGCAAAGTGTTTTTCTGGGGAGGAAGAACGGCCCCAGGTTCAGACGGAAACGTCTCT

22,695



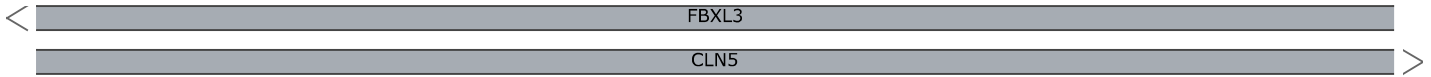
CTTCCAAACTAGCTACAAGATTAGAAATTACAATGTGGGGGTCATGAAGCCTCTGGCTCCAAGAGTCTGAACCTCCCCAAATTGC  
-----  
GAAGGTTTGATCGATGTTCTAATCTTTAATGTTACACCCCAGTACTTCGGAGACCGAGGTTCTCAGACTTGGAGGGGTTTAACG

22,780



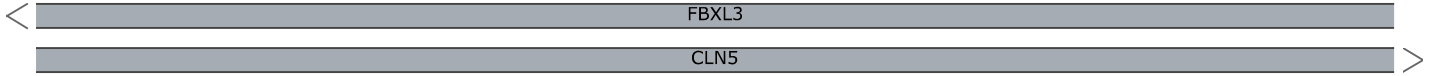
TCCTGGCAATAACATGATTATTGTA AACCTAAGAACAGTGCTTGAGATATTTTGCAAACCTGCACTAGATGGATCAGCTGACA  
-----  
AGGACCGTTATTGTACTAATAACATTTTGGATTCTTGTACGAACCTATAAAACGTTTGGGACGTGATCTACCTAGTCGACTGT

22,865



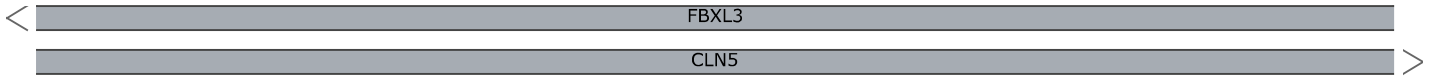
CCATCCAGACTGGTAATCTGGGCCAACTGGTTCTGCCATGGCACCTAGGAACAGAAGACATTAAGAAAACCTAACTCTGACCCCT  
-----  
GGTAGGTCTGACCATTAGACCCGGTTGACCAAGACGGTACCGTGGATCCTTGTCTTCTGTAATTCTTTTGGATTGAGACTGGGGA

22,950



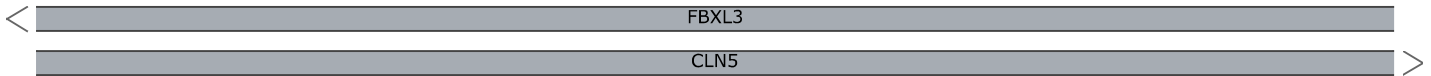
TATAATTCCATCTCCAAACTGACCAATCAGCACTTCCCAAGCCCTACCTGCCAAATTATCTTTAAAAATTCTGATCTCCAAATG  
-----  
ATATTAAGGTAGAGGTTTGACTGGTTAGTCGTGAAGGGTTTCGGGGATGGACGGTTTAATAGAAATTTTAAAGACTAGAGGTTTAC

23,035



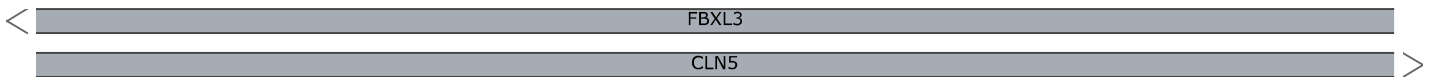
CTCGGGAAGACTGATTTGAGTAATAACAAAACCTCTAGTCTCCCACACAGCCGGCTCTGCGTGAATTACTCTTTCTTCATTGCAAT  
-----  
GAGCCCTTCTGACTAAACTCATTATTGTTTTGAGATCAGAGGGTGTGTGCGCCGAGACGCACTTAATGAGAAAAGAAGTAACGTTA

23,120



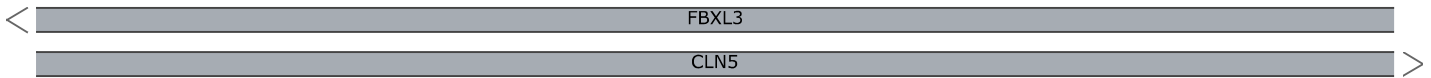
TCCCATCTTGATAAATCGGTTCTGTCTGGGCAACGGACAAGGTGAACCCATTGGGCGGATCCCACAATTAAGTGGGATCAAGTAA  
-----  
AGGGTAGAACTATTTAGCCAAGACAGACCCGTTGCCTGTTCCACTTGGGTAAACCCGCCTAGGGTGTTAATTCACCCTAGTTCATT

23,205



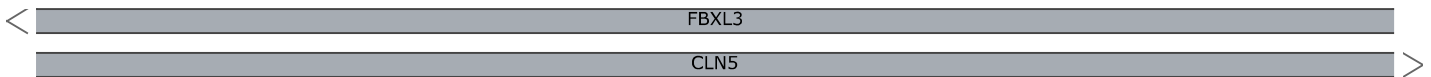
GCTTATACTATACTATCAGAACTGTTGTGTATATTTAATAAAAAATGAATGAACACAGAATATACCAGAATAAAGAGAAGTATGAA  
-----  
CGAATATGATATGATAGTCTTGACAACACATATAAATTATTTTACTTACTTGTGTCTTATATGGTCTTATTTCTCTTGATACTT

23,290



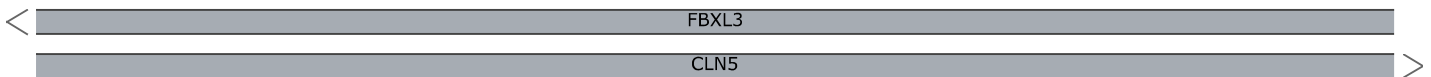
CTCACAGTTTTATAGAGAAATCAGAGACATAAAGACTCATACAATGTGTTAAATGCTAGCAATAAAGTTCACAGTGTCTGGAAA  
-----  
GAGTGTCAAAATATCTCTTTAGTCTCTGTATTTCTGAGTATGTTACACAATTTACGATCGTTATTTCAAGTGTCAACAAGACCTTT

23,375



TACACAGGTAGGAAATCTCAACCAGAAAGGAGAAGTTCCTTCTCCTACGTTGACAGGCAGGTCAACAAAGATCACATCTGAGCT  
-----  
ATGTGTCCATCCTTTAGAGTTGGTCTTTCTCTTCAAGGGAAGAGGATGCAACTGTCCGTCCAGTTGTTTCTAGTGTAGACTCGA

23,460

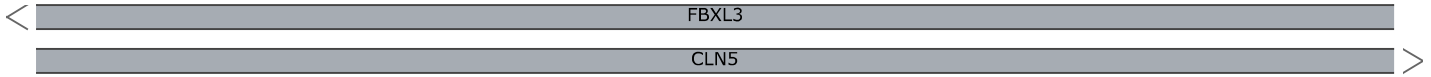






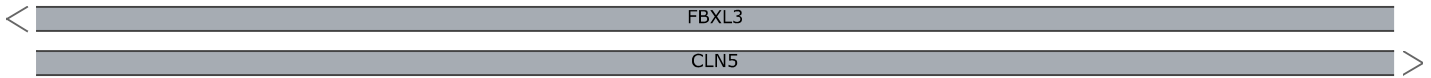
AGTGTCTCTAAATCAGAGAAACCCTGGAAGTAAAAAGAGGAATTCTGGAACCCAGGATGAGAATCTCTCTCAGACACTTCATT  
TCACAGAGATTTAGTCTCTTTGGTGACCATTCAATTTTTCTCCTTAAGACCTTGGGTCCTACTCTTAGAGAGAGTCTGTGAAGTAA

25,245



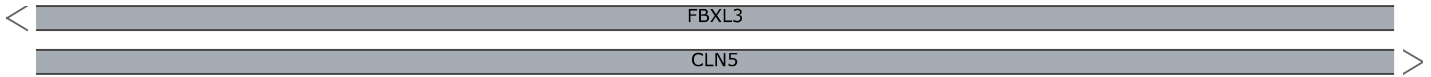
TTGCCATATCTGGAAACCCTAGTGTCTATAACACTAAACTGCATTTCTTTTCTGTTTGATAGTTATGACCACTAAATAGTAACT  
AACGGTATAGACCTTTGGGATCACAAGATATTGTGATTTGACGTAAAGAAAAGACAAACTATCAATACTGGTGATTTATCATTGA

25,330



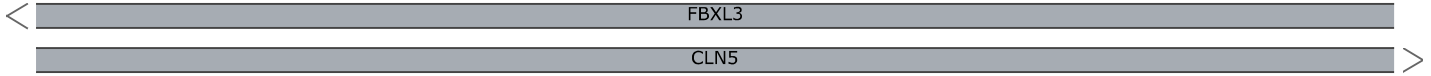
ATTAACACCATCATTAAAAATTAATAATTTATTCAAAATCTATGACAGACTCATTGAGATATGAAAACCTCATAGAAAATTTGAT  
TAATTGTGGTAGTAATTTTTAATTATTAATAAAGTTTTAGATACTGTCTGAGTAAACTCTATACTTTTGAGTATCTTTTAAACTA

25,415



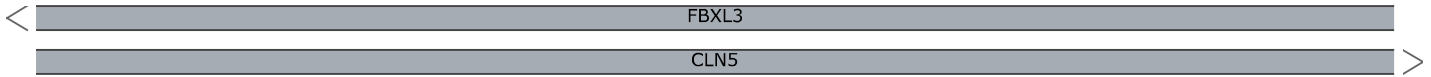
TATAAAACAATCAAAATAATACTTAAAAATCCAAGTTTTAAAACCTCTTCAAATGTTATCTACAATATTTTCAAGTCTTCTATTTT  
ATATTTTGTAGTTTTATTATGAATTTTAAGGTTCAAATTTTGGGAAGTTTACAATAGATGTTATAAAAAGTTCAGAAGATAAAA

25,500



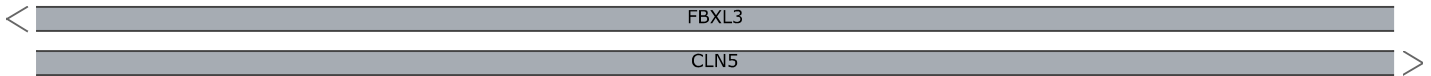
AATGTATTTTGTATCCACAAAAGCACCAATGAGTATCATTCAATCATATATGTATATATTTGTATGTATGTACATATGTGTATATAC  
TTACATAAAAACCTAGGTGTTTTCTGTGGTTACTCATAGTAAGTAGTATATACATATATAAACATACATACATGTATACACATATATG

25,585



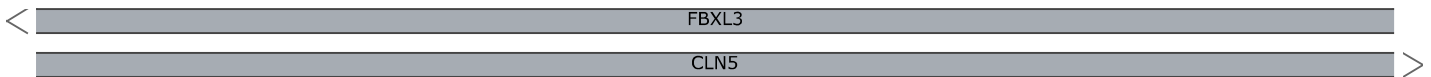
ACACATACACACACACGTTATATATCTGTTGGACAGGATTTGATCTAAAGGAATCAATGTAGGCCAACAGGAATTAAGCATT  
TGTGTATGTGTGTGTGTGCAATATATAGACAACCTGTCTAAACTAGATTTCTTAGTTACATCCGTTTGTCTTAATTTTCGTAA

25,670



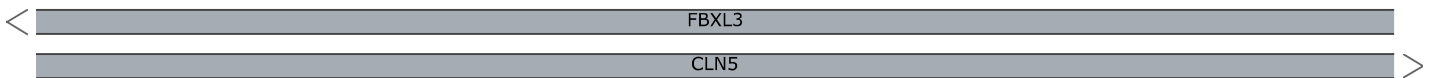
CTCAAAGTATGCAGCTCTCAATCGGAGCTAAGATATGAGTTGAAACCACTGGGCAAAGAATCTAGGAGAGTAAAGAAAAGGCTAAT  
GAGTTTCATACGTCGAGAGTTAGCCTCGATTCTATACTCAACTTTGGTGACCCGTTTCTTAGATCCTCTCATTTCTTTCCGATTA

25,755



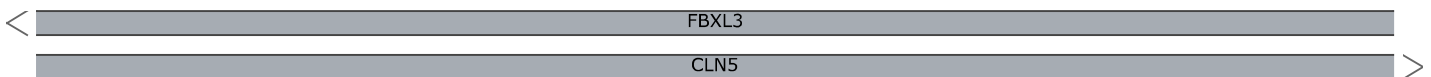
ACATGGTCTAACACATTCTCTCTACAAAACCAACTTCATGCTCCAGTTAAGCTTTATAAATTTCTCTACAGGAGTGAAAAAGGAT  
TGTACCAGATTGTGTAAGGAGAGATGTTTTGGTTGAAGTACGAGGTCAATTCGAAATATTTAAGAGATGTCCTCACTTTTTCTTA

25,840



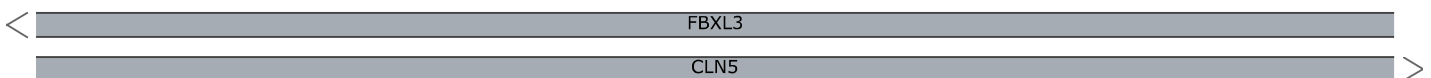
AAGGGCAGGCTAAGAGCCAAGAAAAGTATAATGAAACATTACTTTTTTTTTTTTTTGGAGACAGAGTACTGTTCTTGTACCCAGGC  
TTCCCGTCCGATTCTCGGTTCTTTTCATATTACTTTGTAATGAAAAAAAAAAAAAAAACTCTGTCTCATGACAAGAACAGTGGGTCCG

25,925



TGGAGTGCCTGGCACTCCTTAGCTCACTACAACCTTGAACCTCCTGAACTTAAGCAATCCTGTTTTCATCCTCCCTAGTAGCTAAG  
ACCTCACGTGACCGTGAGGAATCGAGTGATGTTGGAACCTTGAGGACTTGAATTCGTTAGGACAAAAGTAGGAGGGGATCATCGATT

26,010

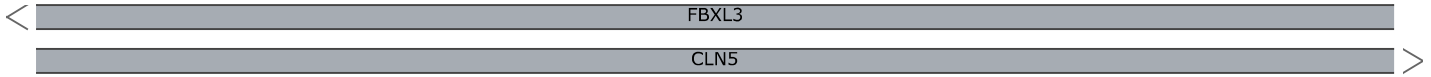






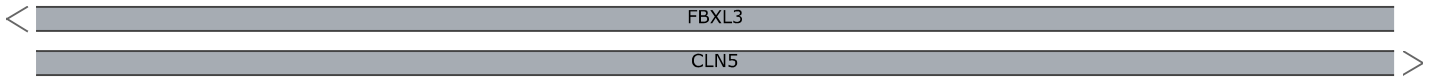
AATCACCCCGAATTTGAAAAAGGGATAGAAATCCAAAATTTAGGAGGCTATTCAGAAGATTTTTACACATTAAGTCGGAGTACCA  
TTAGTGGGGCTTAAACTTTTTCCCTATCTTTAGGTTTTAAATCCTCCGATAAGTCTTCTAAAAATGTGTAATTCAGCCTCATGGT

26,945



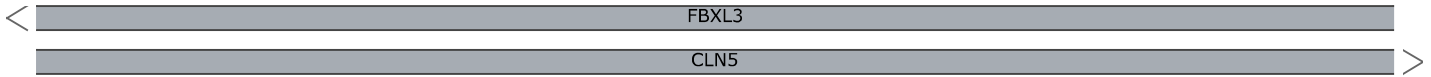
CAATGATCTTTCTGTACTTAGGATCTTAAAAATTAAGATAATCAGATTCTCCTGCCATTTCCCTTATTTTATATGTGAAGAAA  
GTTACTAGAAAAGACATGAATCCTAGAATTTTATAATTCTATTAGTCTAAGAGGACGGGTAAAGGGAATAAAATATACACTTCTTT

27,030



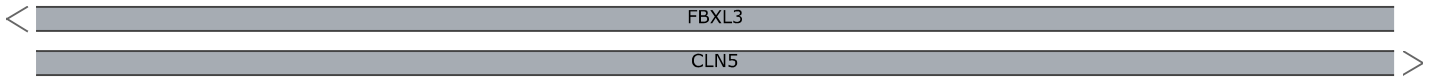
AACATTTTATCTCAAAATATACATATGTAATGAAAATGTTTCAAAATCAATTAAGACTTTGACATCAACTGGTGATTTATTTGGT  
TTGTAATAATAGAGTTTTATATGTATACATTACTTTTACAAAGTTTTAGTTAATTCTGAAACTGTAGTTGACCACTAAATAAACCA

27,115



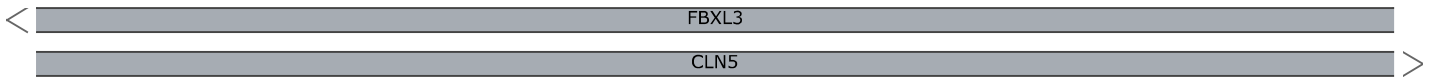
ACAGACATTCCACTGAAACGACCACTTGGGTTAATATATTCAATTTAGTTATATTTCCCTCCTCAATCATCCTAGTACATTAACT  
TGTCTGTAAGGTGACTTTGCTGGTGAACCCAATTATATAAGTTAAATCAATATAAGGGAGGAGTTAGTAGGATCATGTAATTTGA

27,200



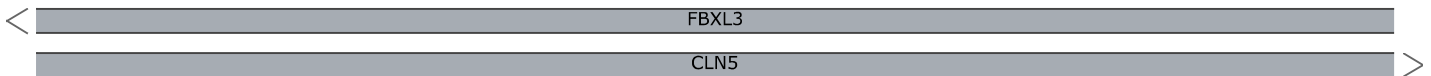
ACTAGATACTTAAAAGGGTGTCTATATTTTAGTTTTAGTGTCTTCTGGGAAAAAATATCAAATTATTGTTGGATACTAACCTA  
TGATCTATGAATTTTCCCACAGATATAAAATCAAAGTCAACAGAAGACCCTTTTTTTTATAGTTTAATAACAACCTATGATTGGAT

27,285



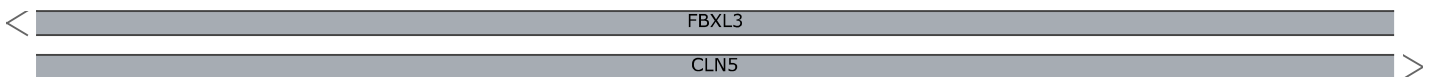
TTAACCATTAGCTAACATATTCAGACACCTTTACCAGTTGCCTTTCTAAAAATGCACCCTTCTTATTTTTGTATTTTAAGAGAAT  
AATTGGTAATCGATTGTATAAGTCTGTGGAAATGGTCAACGGAAAGATTTTTACGTGGGAAGAATAAAAAACATAAAATTTCTCTTA

27,370



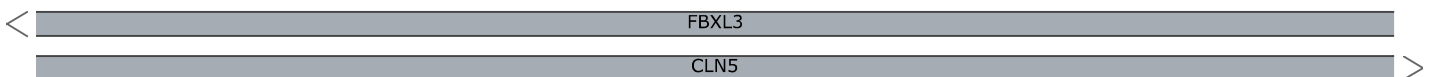
AGTTGTGAGAGAGAGACACGATCTCTGATTATATGCAGGATCATGTTAGAATATATATAAGAATATATGTTAACTTTTCACCCAA  
TCAACACTCTCTCTGTGCTAGAGACTAATATACGTCTAGTACAATCTTATATATATTCTTATATACAATTGAAAAGTGGGTT

27,455



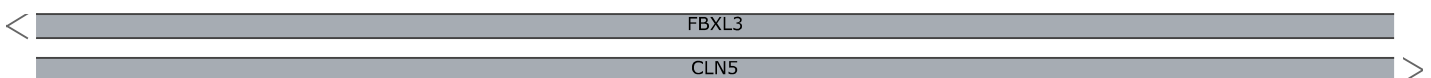
AGAAAAGGATGTCTTTAAGTCTGTAAATTAATCTAAACTGTGCTGAGACTAACTTTGGTCATGATTAAATCTTTCCAGAACATTTG  
TCTTTCTACAGAAATTCAGACATTTAATTAGATTTGACACGACTCTGATTGAAACCAGTACTAATTTAGAAAAGGTCTTGTAAC

27,540



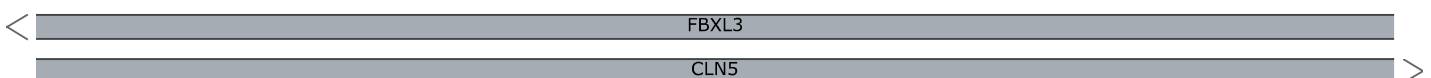
CCAAAAGATTTTAGAAGCTATACCTGCTCTCAATATTGGCACTCTACTTTTCTTTGATTCTAACTTCACCAACCTGCTCTGGAAG  
GGTTTTCTAAAAATCTTCGATATGGACGAGAGTTATAACCGTGAGATGAAAAGAAACTAAGATTGAAGTGGTTGGACGAGACCTTC

27,625



CCCCAAAATGAGTATCTATGTGTCCCTTTTTTCTAATATGCTTGACTCTATTTTACTTACTGAATTTCTTTTAATACTTCCTAT  
GGGGTTTTACTCATAGATACACAGGGAAAAAAGATTATACGAACTGAGATAAAATGAATGACTTAAAGAAAATATGAAGGATA

27,710





Feature	Location	Size	Type
✓ <b>CLN5</b>	1 .. 28,484	28,484 bp	gene
/note	= gene <a href="#">ENSG00000102805</a> Protein coding		
<b>CLN5-208</b>	1 .. 14,458	14,458 bp	prim_transcript
/note	= primary transcript <a href="#">ENST00000636183</a>		
<b>CLN5-216</b>	1385 .. 11,818	10,434 bp	prim_transcript
/note	= primary transcript <a href="#">ENST00000636780</a>		
<b>CLN5-202</b>	1400 .. 7204	5805 bp	prim_transcript
/note	= primary transcript <a href="#">ENST00000485938</a>		
	1419 .. 138,930	137,512 bp	gene
/note	= gene <a href="#">ENSG00000283208</a> Protein coding		
	1419 .. 87,366	85,948 bp	prim_transcript
/note	= primary transcript <a href="#">ENST00000638147</a> Protein coding		
<b>CLN5-219</b>	1419 .. 9317	7899 bp	prim_transcript
/note	= primary transcript <a href="#">ENST00000637537</a>		
✓ <b>CLN5-201</b>	1422 .. 14,458	13,037 bp	prim_transcript
/note	= primary transcript <a href="#">ENST00000377453</a>		
<b>CLN5-218</b>	1428 .. 26,472	25,045 bp	prim_transcript
/note	= primary transcript <a href="#">ENST00000637397</a>		
<b>CLN5-207</b>	1430 .. 5440	4011 bp	prim_transcript
/note	= primary transcript <a href="#">ENST00000635989</a>		
<b>CLN5-203</b>	1432 .. 11,686	10,255 bp	prim_transcript
/note	= primary transcript <a href="#">ENST00000616833</a>		
<b>CLN5-211</b>	1437 .. 28,484	27,048 bp	prim_transcript
/note	= primary transcript <a href="#">ENST00000636525</a>		
<b>CLN5-215</b>	1439 .. 27,707	26,269 bp	prim_transcript
/note	= primary transcript <a href="#">ENST00000636767</a>		
<b>CLN5-205</b>	1439 .. 20,309	18,871 bp	prim_transcript
/note	= primary transcript <a href="#">ENST00000635905</a> Retained intron		
<b>CLN5-211</b>	1440 .. 26,486	25,047 bp	CDS
▶ 5 segments = 813 bp			
/note	= coding sequence <a href="#">ENSP00000490078</a>		
/translation	= MAQEVDTAQQGAEMRRGAGAARGRASWCWALALLWLAVVPGWSRVSGIPSRRHWPVYPYK,,RFDFRPKDPYQCQAKYTCPTGSPIPVME GDDDIEVFRLQAPVWEFKYGDLLGHL,,KIMHDAIGFRSTLTGKNYTMWYELFQLGNCTFPHLRPEMDAPFWCNQGAACFFEGIDDVHWK ENGLTVQVATIS,,GFHHVQGQDSIELRTSSDPPILASQ SAGITDV SHCTRPTIRILPQRGTLTYL,,LWTKTFLCLSLQFSWDFQNIATPYFNLL 248 amino acids = 30.7 kDa		
<b>CLN5-215</b>	1440 .. 26,087	24,648 bp	CDS
▶ 5 segments = 747 bp			
/note	= coding sequence <a href="#">ENSP00000489855</a>		
/translation	= MAQEVDTAQQGAEMRRGAGAARGRASWCWALALLWLAVVPGWSRVSGIPSRRHWPVYPYK,,RFDFRPKDPYQCQAKYTCPTGSPIPVME GDDDIEVFRLQAPVWEFKYGDLLGHL,,KIMHDAIGFRSTLTGKNYTMWYELFQLGNCTFPHLRPEMDAPFWCNQGAACFFEGIDDVHWK ENGLTVQVATIS,,GFHHVQGQDSIELRTSSDPPILASQ SAGITDV SHCTRPTIRILPQRGTLTYL,,RWVLLCCPG* 248 amino acids = 28.0 kDa		
<b>CLN5-218</b>	1440 .. 22,246	20,807 bp	CDS
▶ 5 segments = 822 bp			
/note	= coding sequence <a href="#">ENSP00000490422</a>		
/translation	= MAQEVDTAQQGAEMRRGAGAARGRASWCWALALLWLAVVPGWSRVSGIPSRRHWPVYPYK,,RFDFRPKDPYQCQAKYTCPTGSPIPVME GDDDIEVFRLQAPVWEFKYGDLLGHL,,KIMHDAIGFRSTLTGKNYTMWYELFQLGNCTFPHLRPEMDAPFWCNQGAACFFEGIDDVHWK ENGLTVQVATIS,,GFHHVQGQDSIELRTSSDPPILASQ SAGITDV SHCTRPTIRILPQRGTLTYL,,SLALLPGWSTVVRRLTATSA SRIQTIF 279 amino acids = 30.7 kDa		

Feature	Location	Size	Type
✓ <b>CLN5-201</b>	1440 .. 10,310	8871 bp	CDS
▶ 4 segments = 1077 bp			
/note	= coding sequence <a href="#">ENSP00000366673</a>		
/translation	= MAQEVDTAQGAEMRRGAGAARGRASWCWALALLWLAVVPGWSRVSGIPSRRHWPVYK,,RFDFRPKDPYCQAKYTFCTGSPIPVME GDDDIIEVFRLQAPVWEFKYGDLLGHL,,KIMHDAIGFRSTLTGKNYTMWYELFQLGNCTFPHLRPEMDAPFWCNQGAACFFEGIDDVHWK ENGLTLVQVATIS,,GNMNFQMAKWVKQDNETGIYYETWNVKASPEKGAETWFDSYDCSKFVLRTFNKLAEFGAEFKNIETNYTRIFLYSGE PTYLGNETSVMFGPTGKNTLGLAIKRFYYPFKPHLPTKEFLLSLQIFDAVIVHKQFYLFYNFYWFPLMKFPFIKITYEEIPLIRNKTLISGL* 358 amino acids = 41.5 kDa		
<b>CLN5-208</b>	1440 .. 10,310	8871 bp	CDS
▶ 4 segments = 1077 bp			
/note	= coding sequence <a href="#">ENSP00000490181</a>		
/translation	= MAQEVDTAQGAEMRRGAGAARGRASWCWALALLWLAVVPGWSRVSGIPSRRHWPVYK,,RFDFRPKDPYCQAKYTFCTGSPIPVME GDDDIIEVFRLQAPVWEFKYGDLLGHL,,KIMHDAIGFRSTLTGKNYTMWYELFQLGNCTFPHLRPEMDAPFWCNQGAACFFEGIDDVHWK ENGLTLVQVATIS,,GNMNFQMAKWVKQDNETGIYYETWNVKASPEKGAETWFDSYDCSKFVLRTFNKLAEFGAEFKNIETNYTRIFLYSGE PTYLGNETSVMFGPTGKNTLGLAIKRFYYPFKPHLPTKEFLLSLQIFDAVIVHKQFYLFYNFYWFPLMKFPFIKITYEEIPLIRNKTLISGL* 358 amino acids = 41.5 kDa		
<b>CLN5-203</b>	1440 .. 9329	7890 bp	CDS
▶ 4 segments = 624 bp			
/note	= coding sequence <a href="#">ENSP00000479547</a>		
/translation	= MAQEVDTAQGAEMRRGAGAARGRASWCWALALLWLAVVPGWSRVSGIPSRRHWPVYK,,RFDFRPKDPYCQAKYTFCTGSPIPVME GDDDIIEVFRLQAPVWEFKYGDLLGHL,,KIMHDAIGFRSTLTGKNYTMWYELFQLGNCTFPHLRPEMDAPFWCNQGAACFFEGIDDVHWK ENGLTLVQVATIS,,GNMNFQMAKWVKQDNETGIYYETWNVKASPEKGAETWFDSYDCSKFVLRTFNKLAEFGAEFKNIETNYTRIFLYSGE PTYLGNETSVMFGPTGKNTLGLAIKRFYYPFKPHLPTKEFLLSLQIFDAVIVHKQFYLFYNFYWFPLMKFPFIKITYEEIPLIRNKTLISGL* 358 amino acids = 41.5 kDa		
<b>CLN5-216</b>	1440 .. 7412	5973 bp	CDS
▶ 4 segments = 594 bp			
/note	= coding sequence <a href="#">ENSP00000489809</a>		
/translation	= MAQEVDTAQGAEMRRGAGAARGRASWCWALALLWLAVVPGWSRVSGIPSRRHWPVYK,,RFDFRPKDPYCQAKYTFCTGSPIPVME GDDDIIEVFRLQAPVWEFKYGDLLGHL,,KIMHDAIGFRSTLTGKNYTMWYELFQLGNCTFPHLRPEMDAPFWCNQGAACFFEGIDDVHWK ENGLTLVQVATIS,,GNMNFQMAKWVKQDNETGIYYETWNVKASPEKGAETWFDSYDCSKFVLRTFNKLAEFGAEFKNIETNYTRIFLYSGE PTYLGNETSVMFGPTGKNTLGLAIKRFYYPFKPHLPTKEFLLSLQIFDAVIVHKQFYLFYNFYWFPLMKFPFIKITYEEIPLIRNKTLISGL* 358 amino acids = 41.5 kDa		
<b>CLN5-219</b>	1440 .. 7412	5973 bp	CDS
▶ 4 segments = 594 bp			
/note	= coding sequence <a href="#">ENSP00000489711</a>		
/translation	= MAQEVDTAQGAEMRRGAGAARGRASWCWALALLWLAVVPGWSRVSGIPSRRHWPVYK,,RFDFRPKDPYCQAKYTFCTGSPIPVME GDDDIIEVFRLQAPVWEFKYGDLLGHL,,KIMHDAIGFRSTLTGKNYTMWYELFQLGNCTFPHLRPEMDAPFWCNQGAACFFEGIDDVHWK ENGLTLVQVATIS,,GNMNFQMAKWVKQDNETGIYYETWNVKASPEKGAETWFDSYDCSKFVLRTFNKLAEFGAEFKNIETNYTRIFLYSGE PTYLGNETSVMFGPTGKNTLGLAIKRFYYPFKPHLPTKEFLLSLQIFDAVIVHKQFYLFYNFYWFPLMKFPFIKITYEEIPLIRNKTLISGL* 358 amino acids = 41.5 kDa		
<b>CLN5-202</b>	1440 .. 5479	4040 bp	CDS
▶ 3 segments = 576 bp			
/note	= coding sequence <a href="#">ENSP00000482959</a>		
/translation	= MAQEVDTAQGAEMRRGAGAARGRASWCWALALLWLAVVPGWSRVSGIPSRRHWPVYK,,RFDFRPKDPYCQAKYTFCTGSPIPVME GDDDIIEVFRLQAPVWEFKYGDLLGHL,,KIMHDAIGFRSTLTGKNYTMWYELFQLGNCTFPHLRPEMDAPFWCNQGAACFFEGIDDVHWK ENGLTLVQVATIS,,GNMNFQMAKWVKQDNETGIYYETWNVKASPEKGAETWFDSYDCSKFVLRTFNKLAEFGAEFKNIETNYTRIFLYSGE PTYLGNETSVMFGPTGKNTLGLAIKRFYYPFKPHLPTKEFLLSLQIFDAVIVHKQFYLFYNFYWFPLMKFPFIKITYEEIPLIRNKTLISGL* 358 amino acids = 41.5 kDa		
✓ <b>Donor Template WT -&gt; SNV</b>	1485 .. 1549	65 bp	misc_feature
<b>CLN5-206</b>	1501 .. 11,752	10,252 bp	prim_transcript
/note	= primary transcript <a href="#">ENST00000635915</a> Nonsense mediated decay		
✓ <b>Protospacer Sequence</b>	1502 .. 1521	20 bp	misc_feature
✓ <b>SNV</b>	1517 .. 1517	1 bp	misc_feature
/note	= WT = G SNV = A		
✓ <b>PAM</b>	1522 .. 1524	3 bp	misc_feature
<b>CLN5-209</b>	1698 .. 4208	2511 bp	prim_transcript
/note	= primary transcript <a href="#">ENST00000636405</a>		
<b>CLN5-213</b>	1726 .. 10,672	8947 bp	prim_transcript
/note	= primary transcript <a href="#">ENST00000636681</a> Nonsense mediated decay		
<b>CLN5-214</b>	1914 .. 11,805	9892 bp	prim_transcript
/note	= primary transcript <a href="#">ENST00000636705</a>		

Feature	Location	Size	Start	End	Type
<b>CLN5-214</b>	1914 .. 10,310	8397 bp	■	→	CDS
▶ 4 segments = 913 bp					
/note	= coding sequence <a href="#">ENSP00000490937</a>				
/translation	= WVQ,,AL*LPSKT*SLLSS*VYFLSNWLTPSYGG***H*SFSITSPSMGI*IWRPPGTL,,ENYA*CHWIQKYINWQELHNGMV*TFPTWQL YISPST*NGCPFLV*SRRCLLF*GN**CSLEGKWDISSSNYIR,,KHVQPNGKVGETGQ*NRNLL*DMECKSQPRKGGDMV*FLRLFQI CVKDL*QVG*IWSRVQEHRNQLYKNISLQWRTYLSGK*NICFWANRQKDSWFSHKILLPLQTTFAN*RISVESLANF*CSDCAQTVLFV 504 codons (27 internal stop codons)				
<b>FBXL3</b>	1939 .. 36,536	34,598 bp	■	←	gene
/note	= gene <a href="#">ENSG00000005812</a> Protein coding				
<b>FBXL3-206</b>	1939 .. 24,922	22,984 bp	■	←	prim_transcript
/note	= primary transcript <a href="#">ENST00000485797</a>				
<b>CLN5-210</b>	3392 .. 9280	5889 bp	■	→	prim_transcript
/note	= primary transcript <a href="#">ENST00000636520</a> Retained intron				
<b>CLN5-212</b>	4570 .. 5618	1049 bp	■	→	prim_transcript
/note	= primary transcript <a href="#">ENST00000636602</a> Retained intron				
<b>CLN5-217</b>	4578 .. 11,770	7193 bp	■	→	prim_transcript
/note	= primary transcript <a href="#">ENST00000637278</a> Retained intron				
	5256 .. 138,930	133,675 bp	■	→	prim_transcript
/note	= primary transcript <a href="#">ENST00000637192</a> Nonsense mediated decay				
	5295 .. 85,539	80,245 bp	■	→	prim_transcript
/note	= primary transcript <a href="#">ENST00000635838</a> Protein coding				
	5300 .. 109,741	104,442 bp	■	→	prim_transcript
/note	= primary transcript <a href="#">ENST00000638101</a> Protein coding				
<b>FBXL3-205</b>	8478 .. 28,027	19,550 bp	■	←	prim_transcript
/note	= primary transcript <a href="#">ENST00000477982</a>				
<b>CLN5-204</b>	9123 .. 9724	602 bp	■	→	prim_transcript
/note	= primary transcript <a href="#">ENST00000635761</a>				
<b>FBXL3-201</b>	14,601 .. 36,500	21,900 bp	■	←	prim_transcript
/note	= primary transcript <a href="#">ENST00000355619</a> Protein coding				
<b>FBXL3-202</b>	16,906 .. 36,536	19,631 bp	■	←	prim_transcript
/note	= primary transcript <a href="#">ENST00000417323</a> Protein coding				
	17,943 .. 86,519	68,577 bp	■	→	prim_transcript
/note	= primary transcript <a href="#">ENST00000461131</a> Retained intron				
<b>FBXL3-203</b>	24,506 .. 28,085	3580 bp	■	←	prim_transcript
/note	= primary transcript <a href="#">ENST00000470210</a>				
<b>FBXL3-204</b>	24,852 .. 36,426	11,575 bp	■	←	prim_transcript
/note	= primary transcript <a href="#">ENST00000472949</a>				

Primer	Length		Binding Sites		Tm	Date Added
✓ <b>PCR Forward</b>	20-mer		1228 .. 1247		56°C	Oct 16, 2022
/sequence	=	GACCAAAGCACCTTCCTGGA 55% GC / 6071.0 Da				
✓ <b>Sanger Sequencing</b>	20-mer		1228 .. 1247		56°C	Oct 16, 2022
/sequence	=	GACCAAAGCACCTTCCTGGA 55% GC / 6071.0 Da				
✓ <b>Donor Template WT -&gt; SNV</b>	65-mer		1485 .. 1549		88°C	Oct 13, 2022
/sequence	=	GGCGCGGGCGCGGCTCGGGGACGCGCTTCCTGATGCTGGGCCCTGGCGCTGCTTTGGCTCGCGGT 77% GC / 20,138.9 Da				
✓ <b>gRNA Protospacer</b>	20-mer		1502 .. 1521		67°C	Oct 16, 2022
/sequence	=	GGGACGCGCTTCCTGGTGCT 70% GC / 6141.0 Da				
✓ <b>PCR Reverse</b>	19-mer		1654 .. 1672		58°C	Oct 16, 2022
/sequence	=	CCCATCCCCCATCGTCAAC 63% GC / 5613.7 Da				