

INK2J00050_ERBB4_R927Q_B04_BB
 12,856 bp

5'

3'

AAAAGTCTAAGTTCTTTACCATGACATATAAGGGACCCCTTCTTGGACCTGCCTCTTCTTTTGTGTTTTCAGTTTCACTGCTCACCA
TTTTTCAGATTCAAGAAATGGTACTGTATATTCCTGGGAAGAACCTGGGACGGAGAAGAAAAACAAAAGTCAAAGTGACGAGTGGT

85

ERBB4

ERBB4-202

CTGTCCCTCATACATTATGCTTTAAAAATACAGAATTGCATATCTTGGTGCAAGTACGCCATGGTACTGCTACCCCTGTGCTTGT
GACAGGGAGTATGTAATACGAAATTTTTATGTCTTAACGTATAGAACCACGTTTCATGCGGTACCATGACGATGGGGACACGAACA

170

ERBB4

ERBB4-202

TCTGTTTGCCTGCAGTTTTACCCCTCACTCTGTCCAATTGGGAGACATCATTCAACCCCTACTTAGGCCTTGGTACTGCTTTGAAG
AGACAAACGGACGTCAAATGGGAGTGAGACAGTTAACCCCTCTGTAGTAAGTTGGGAATGAATCCGGAACCATGACGAAACTTC

255

ERBB4

ERBB4-202

TCTCTCCTCTCACGCATACTTGCTAGGCTATACTACATAAGGGCCTCAGAATAGAGTTCTCTTTAAATGCCTTGCATGTATCACA
AGAGAGGAGAGTGCGTATGAACGATCCGATATGATGTATTCCCGGAGTCTTATCTCAAGAGAAATTTACGGAACGTACATAGTGT

340

ERBB4

ERBB4-202

TCAGTCCATTCAAGTTTTTATTCCTATCCGCCACTTTATTAATTAGCTTCTGTTCTCCTTTAATATACAGACCTTATCTGAAT
AGTCAGGTAAGTTCAAAAATAAGGGATAGGCGGGTGAAATAATTAATCGAAGACAAGAGGAAATTATATGTCTGGAATAGACTTA

425

ERBB4

ERBB4-202

CTTTTTGTCTTCTCAGTATCTGTCTATATAGTCCAGCATATAGTACGTGTTAACCTGTTGCCAACATATATTCCGTGTTCTGAT
GAAAAAACAGAAGAGTCATAGACAGATATATCAGGTCGTATATCATGCACAATTGGACAACGGTTGTATATAAGGCACAAGACTA

510

ERBB4

ERBB4-202

ATGAAGGTGATAAGAAAGAGAATAATGAATGTTTCATGAACATTTGTTAAAGGGATAGTATTACTTGGGAAGATATGAAAATATT
TACTTCCACTATTCTTTCTCTTATTACTTACAAAGTACTTGTAACAATTTCCCTATCATAATGAACCCCTTCTATACTTTTATAA

595

ERBB4

ERBB4-202

CTATCTCCAAGGCAATGCATTTATTTGTTTTTTTTTTTTTTTGGATCCTTTAAGTCATATAAGGGCTATATGTTCTCAGATGTA
GATAGAGGTTCCGTTACGTAATAAACAAAAAAAAAAAAAAAAACTAGGAAATTCAGTATATTCCTGATATACAAGAGTCTACATGA

680

ERBB4

ERBB4-202

TTATTATAGGAATTTCTAATTTAATGTAAGTCAAAACACAAAGCACTGTTTAGGAGAGAGGGCAAAAAGTCCCATAAATCTCGGTTGT
AATAATATCCTTAAAGATTAAATTACATGAGTTTGTGTTTCGTGACAAATCCTCTCTCCGTTTTTCAGGGTATTTAGAGCCAACA

765

ERBB4

ERBB4-202

AAGTTGATTTTCAGAAAACACTAATACACACAGCGTCAACCAACTGTTGACTGATTAGACCATATCAGGCAGTATCCCCACTGGTT
TTCAACTAAAGTCTTTTGTGATTATGTGTGTCGCAGTGGGTTGACAACCTGACTAATCTGGTATAGTCCGTCATAGGGGTGACCAA

850

ERBB4

ERBB4-202

GTGTTTAATGTGCATTTATATGGGGTTTGGCTCATGATGCTGTTTTGAAGTAATCTTCTCTTTACACTACACCAGGTATACGGTTC
CACAAATTACACGTAAATATACCCCAAACCGAGTACTACGACAAACTTCATTAGAAGAGAAATGTGATGTGGTCCATATGCCAAG

935

ERBB4

ERBB4-202

ATAATTTTTGACCTGTGTGATTTATGTGTCTGTTTTCCACAGCTTTTGTGTTTATGATATTAGAAACCATTAAATCCTTCAAAGTCCT
TATTAATAAACTGGACACACTAAATACACAGACAAAAGGTGTCGAAAACAAAACATAATCTTTGGTAATTAGGAAGTTTCAGGA

1020

ERBB4

ERBB4-202

GCAGTTGTAATGTTAACTGCCACAGCATTGATTTGCAATTGGCATGAGAGTATGCTTCAACATTTTATAATAATTCTAATCTAT
CGTCAACATTACAATTGACGGGTGTCGTAACATAACGTTAACCGTACTCTCATACGAAGTTGTAAAATATTATTAAGATTAGATA

1105

ERBB4

ERBB4-202

TTTTAAATGGTGATCATTTTACCACAAAAATCATCAAATATAGAATTTCCCTAACACTTCAACAAAAATATATTTCACTCTAATC
AAAATTTACCACTAGTAAAATGGTGTTTTTAGTAGTTTATATCTTAAAGGGGATTGTGAAGTTGTTTTATATAAGTGAGATTAG

1190

ERBB4

ERBB4-202

TCGGCCTCAGGTTTATTTCTTAGTTTTACATAAGTTCTTTTGTAAACATAATGTTTAGCAACCCTTAGTTTTACCTAGTACTGA
AGCCGGAGTCCAAATAAAGGAATCAAAATGTATTCAAGAAAAAATTTGTATTACAAATCGTTGGGAATCAAAATGGATCATGACT

1275

ERBB4

ERBB4-202

AGTACAATTAATAAAGTAATTACTCCTCTAGATTATTTTTCTGAATTTGTATAGATTAATACATAACATGTGTTATATA
TCATGTTAATTATTTTATTAAATGAGGAGATCTAATAAAAAAGACTTAAACATATCTATAATTATGTATTGTACACAATATAT

1360

ERBB4

ERBB4-202

TTGTTATACATGGATGTATTGTGAGGAGAGCCAGCTATGTCTCTTGCTGCTAAACACCAACAAATTTTATTTTTAATTTCCCTCT
AACAAATATGTACCTACATAACACTCCTCTCGGTCGATACAGAGAACGACGATTTGTGGTTGTTTAAAATAAAAAATTAAGGGAGA

1445

ERBB4

ERBB4-202

ATGTTTTATAAAGGTAAAATATTAAGGCTAATTTTCAGTGTCATTACAAACTGTGTAATTTCACTATGGATTCTCATAATGACTA
TACAAAATATTTCCATTTTATAATTTCCGATTAAAGTCACAGTAATGTTTGACACATTAAAGTGATACCTAAGAGTATTACTGAT

1530

ERBB4

ERBB4-202

CTGATACCATAGAAGTCTTCTTAAAAATTACAGGTTTGTAAAGACTGCTAGGGTATATACTTCATTCTGTGCATGATTAATAAGAA
GACTATGGTATCTTCAGAAGAATTTTAAATGTCCAAACATTCTGACGATCCCATATATGAAGTAAGACACGTAATAATTATTCTT

1615

ERBB4

ERBB4-202

TAGTATAATAAGAATAGTATAATTTCTTCAGCCTCCATAGAATCTATAATGGTGATTTTGGCACCATTAAACTTCAAATGAAATAT
ATCATATTATTCTTATCATATTAAGAAGTCGGAGGTATCTTAGATATTACCACTAAAACCGTGGTAATTTGAAGTTTACTTTATA

1700

ERBB4

ERBB4-202

TTCTAAAAATTATGGATAAAGGTATTTGTTTGGATGTGTAGGGGGAAGATGACGTGAAGCAGAAGTTATTGAGAAGGAATGATTA
AAGATTTTAAATACCTATTTCCATAAACAAACCTACACATCCCCCTTCTACTGCACCTTCGTCTTCAATAACTCTTCTTACTAAT

1785

ERBB4

ERBB4-202

CAAAATATGTGGGTCAATCCAAGCATATGTTAGCTTATTTACTACAACACCTGCACACCTCACTAAAGAAAGAGTTTGCAAAGGA
GTTTATACACCCAGTTAGGTTTCGTATACAATCGAATAAATGATGTTGTGGACGTGTGGAGTGATTTCTTTCTCAAACGTTTTCT

1870

ERBB4

ERBB4-202

TATCAAGTCACTTGGAAAAATAATGATCTAACATTTAGCTCATGTGAAAGTAATTCTTTTCATCTCATAGGACTTTAGGGAGAAAA
ATAGTTCAGTGAACCTTTTTATTACTAGATTGTAATCGAGTACACTTTCATTAAGAAAGTAGAGTATCCTGAAATCCCTCTTTT

1955

ERBB4

ERBB4-202

CACCAAAAGCTGTTTGTGGTTTGTCTGTCCCCCAAATCAGGTTTTCTCTAATTTTGAAAAATTTCTAGGATTCTGGCTTCACTTAA
GTGGTTTTTCGACAAACACCAAACGACAGGGGGTTTAGTCCAAAAGAGATTAACCTTTTATAAGATCCTAAGACCCGAAGTGAATT

2040

ERBB4

ERBB4-202

AAAATTAGGCACTTCCAACCTGAAGGCTAAGAAACTTTGTTTTAGAAAAATGGGAAAACCTGGGCATTAACCTGAATATCATTAAAG
TTTTAATCCGTGAAGGTTGACTTCCGATTCTTTGAAACAAAATCTTTTTACCTTTTGGACCCGTAATTGACTTATAGTAATTCC

2125

ERBB4

ERBB4-202

AACTTGATATTTTTAGGGAATGATGTACCTGGAAGAAAGACGACTCGTTTCATCGGGATTTGGCAGCCCGTAATGTCTTAGTGAA
TTGAACTATAAAAAAGTCCCTTACTACATGGACCTTCTTTCTGCTGAGCAAGTAGCCCTAAACCGTCGGGCATTACAGAATCACTT

2210

ERBB4

ERBB4-202

830 835 840 845 850
G M M Y L E E R R L V H R D L A A R N V L V K
ENSE00001002880
ERBB4-202

ATCTCAAACCATGTGAAAATCACAGATTTTGGGCTAGCCAGACTCTTGGGAAGGAGATGAAAAAGAGTACAATGCTGATGGAGGA
TAGAGGTTTGGTACACTTTTAGTGTCTAAAACCCGATCGGTCTGAGAACCTTCTCTACTTTTTCTCATGTTACGACTACCTCCT

2295

ERBB4

ERBB4-202

855 860 865 870 875 880
S P N H V K I T D F G L A R L L E G D E K E Y N A D G G
ENSE00001002880
ERBB4-202

AAGGTGGGTATCTTTTTGAGAGCAATCTTGCTTGAAAATATAGTATAATATCCTTTTATCTCCTTATATTTTATACAAGAAACCA
TTCCACCCATAGAAAAACTCTCGTTAGAACGAACTTTTATATCATATTATAGGAAAATAGAGGAATATAAAATATGTTCTTTGGT

2380

ERBB4

ERBB4-202

K
ERBB4-202

ATAAGCCTGAAGCTTAGGAGATTATTAAGCCTTGGTTCTACCATTTGCTCTTCTCCTGCCCGGGTATATATATATGTGTGTGT
TATTCGGACTTCGAATCCTCTAATAATTCGGAACCAAGATGGTAAACGGAGAAGAGGGACGGGGCCCATATATATATACACACACA

2465

ERBB4

ERBB4-202

ERBB4-202

ATATATATATCATATACACACACATATATATATACCATATATTACCAGCTTCCGTTTTCTCAAAAGTAGCTAAAATAAGATGATGC
TATATATATAGTATATGTGTGTGTATATATATATGGTATATAATGGTTCGAAGGCCAAAGAGTTTTTCATCGATTTTATTCTACTACG

2550

ERBB4

ERBB4-202

ERBB4-202

ATGTCTGTACCCAGGTGACCTTCATGTTAGGTCCAGTGATGGAAAGTGGGTGGATCCTTAGGGCTTCTAGAAATTAACCTTTAAC
TACAGACATGGGTCCACTGGAAGTACAATCCAGGTCACCTTTACCCACCTAGGAATCCCGAAGATCTTTAATTTGAAATTG

2635

ERBB4

ERBB4-202

ERBB4-202

ACATGGCTGTAGAAATTTGTCCCACTGATCTAAAGACCGTAGCACTAACTCTTATAGAGAACATAGATTCTCTCTCATAGATTAGA
TGTACCGACATCTTTAACAGGGTGACTAGATTTCTGGCATCGTGATTGAGAATATCTCTTGTATCTAAGAGAGAGTATCTAATCT

2720

ERBB4

ERBB4-202

ERBB4-202

GAAAAGTTTAGGTACTIONACAAAAGAACCCTGAACAGAGCCACTGCCTCGTCTACCTTTTTCTGACCCTCTAGTCTCAGCCTCTGCCTG
CTTTTCAAATCCATGATGTTTTCTTGGGACTTGTCTCGGTGACGGAGCAGATGGAAAAGACTGGGAGATCAGAGTCGGAGACGGAC

2805

ERBB4

ERBB4-202

ERBB4-202

ACAATGGAGTTCCTGACTCTTTCACCCACTATATGGTTTTCAATCCATGCCTTAGTCCCATGTCTTGTATTTCTCATTAACTTC
TGTTACCTCAAGGACTGAGAAAAGTGGGTGATATACCAAAGTTAGGTACGGAATCAGGGTACAGAACATAAAGGAGTAATTGGAAG

2890

ERBB4

ERBB4-202

ERBB4-202

TCTTTAGCTTGACTTTCTTGGCCAAACTATTAGGACTAGACTTCATATGGAGGTCCCTCTAGCTTACCTAGTGAAACCTAAGGT
AGAAATCGAACTGAAAGAACCGGTTTTGATAATCCTGATCTGAAGTATACCTCCAGGGAGATCGAAGTGGATCACTTTGGATTCCA

2975

ERBB4

ERBB4-202

ERBB4-202

CAGGCAGCCCAAATGAAATAAGCAAATGCAATCTTAGGCTATGGTGACCTATAAGCTTACACTAACAAACAACAAAAAAAAACCCA
GTCCGTCGGGTTTACTTTATTTCGTTTACGTTAGAAATCCGATACCACTGGATATTCGAATGTGATTGTTGTTGTTTTTTTTGGGT

3060

ERBB4

ERBB4-202

ERBB4-202

GTTATTCTCATGTCATATAAATATATTTATTATATGCCTTATTTATCATATGGGCCATCCAAATATATATTATAAATATTTTGCA
CAATAAGAGTACAGTATATTTATATAAATAATATACGGAATAAATAGTATACCCGGTAGGTTTATATATAATATTTATAAAACGT

3145

ERBB4

ERBB4-202

ERBB4-202

ATGATAGGTTTTCCAAATGCTTAACTTTATCACAAAGGCAAAATAACACAAAAATTTTAAACTACCCATTTTTGCCTGTTTGT
TACTATCCAAAGGTTTACGAATTGAAATAGTGTTCGTTTTATTGTGTTTTTAAATTTTGATGGGATAAAACGGACAAACAAA

3230

ERBB4

ERBB4-202

ERBB4-202

ACTACCAAATTGCAGTAGTCTGAGACCACAGCATTGAAATTCACTCTAAGACTGCACAGAAGTTGAAGTCTATAAATCACATGGC
TGATGGTTTAAACGTCATCAGACTCTGGTGTCTGTAACTTTAAAGTGAGATTCTGACGTGTCTTCAACTTCAGATATTTAGTGTACCG

3315

ERBB4

ERBB4-202

ERBB4-202

TTCACTTGTCTTGAGAACATAAGATTTGAGACATAAGATTTGTCTAAAGCAAGATTCATTATAGCTTTAAATGCTTGGA
AAGTGAACAGAAGTCTTGTATTCTAAACTCTGTATTCTAAACAGATTTTCGTTCTAAGTAATATCGAAATTTACGAACCATTGATA

3400

ERBB4

ERBB4-202

ERBB4-202

TAAGTCTTTATCAAGCTACCTGTGATTTAACTTACTTCTTTAACACAATGTCCGTAGTCCATAAAGTCTGCTAACTCCTTGCCC
ATTCAGAAATAGTTTCGATGGACACTAAATTTGAATGAAGAAATTGTGTTACAGGCATCAGGTATTTTCAGACGATTGAGGAACGGG

3485

ERBB4

ERBB4-202

ERBB4-202

GTAGGGAAATTACTTTCAATGTGTCTTCTTCCCTTTCACTGAATACCATGATTCTGTCATAGAGTTACCTTGGTGTACCTTG
CATCCCTTTAATGAAAGTTACACAGAAGAGAAGGAAAGTGACTTATGGTACTAAGACAGTATCTCAATGGAACACAGTGGAAC

3570

ERBB4

ERBB4-202

ERBB4-202

GTGAGCAGCCAACCTCATGATTTCAAAGGCCTATTTAGTTTTAAGCTTTCAACTGCAAAGTAGAAGTGTTTTATCTTTATTCCATA
CACTCGTCGGTTGGAGTACTAAAGTTTTCCGGATAAATCAAAATTCGAAAGTTGACGTTTTCATCTTCACAAATAGAAATAAGGTAT

3655

ERBB4

ERBB4-202

ERBB4-202

GAATCTAATTATATTCCCAGCTATATAATGCTGCCCTTCATAGTTGAAACTCATTCTGCTGACCCATCATCAGCAGGATATGTGG
CTTAGATTAATATAAGGGTCGATATATTACGACGGGAAGTATCAACTTTGAGTAAGACGACTGGGTAGTAGTCGTCTTACACC

3740

ERBB4

ERBB4-202

ERBB4-202

GTTGAGATGTTTTCTTGTAGTGATGATAGATTTGTGCTGATCCTTTACATTCTTTTATATAGTTTCTATTTTGAAAATGGTAC
CAACTCTACAAAAAGAACATCACTACTATCTAAACACGACTAGGAAAGTGTAAGAAAATATATCAAGGATAAAAACCTTTTACCATG

3825

ERBB4

ERBB4-202

ERBB4-202

ATATTTTCAATACTGGCTAACCAAGATGAGAGGGGTCATTTGAAGCTGGAAAAACAAAGCAAGGCTAACTTTGGAATTCATGATTT
TATAAAAGTTATGACCGATTGGTTCTACTCTCCCAGTAACTTCGACCTTTTGTTCGTTCCGATTGAAACCTTAAGTACTAAA

3910

ERBB4

ERBB4-202

ERBB4-202

TAGGCGTTTTAGTGGCCAAATTATATGAGAGGAGAAGGGAGGGGGCAAGTATAGAAAAGTCCATTGTAAGTGGTGGCCCAAATG
ATCCGCAAAATCACCGGTTTAATATACTCTCCTCTTCCCTCCCCGTTTCATATCTTTCTCAGGTAACATGACCACCGGGTTTTAC

3995

ERBB4

ERBB4-202

ERBB4-202

TGTCTGAGGGTGAAAAGGGATAACTGAAAGTATAACAAATCTCATTTTTTTGAGAAAAAACTATAAACACATTTTTTAGAAGCATGT
ACAGACTCCCACTTTTCCCTATTGACTTTTCATATTGTTTAGAGTAAAAAACTCTTTTTTGATATTTGTGTA AAAATCTTCGTACA

4080

ERBB4

ERBB4-202

ERBB4-202

GTATTAGATGTTTAGATTTAATATTATAAATCATAATTTTACTAGCAACTTAATTAAGTGAATGTTAATTAAGAACTATAGAAAG
CATAATCTACAAATCTAAATTATAATTTAGTATTATAAATGATCGTTGAATTAATGACTTACAATTAATTTCTTGATATCTTTC

4165

ERBB4

ERBB4-202

ERBB4-202

TTATCCCCACTTAATTATTTTTACCTTTAATTGTTTATAAAGCTTTTTTTTTTAAAAAATAAGTATGACCAAGCAGGGTGGCTCA
AATAGGGGTGAATTAATAAAAAATGGAAATTAACAAATATTTTCGAAAAAAAAATTTTTTTTATTTCATACTGGTTCGTCCACCGAGT

4250

ERBB4

ERBB4-202

ERBB4-202

CGTATGTAATCCCAGCATTTTTGGGAGGTCAAAGCAGGCAGATCACTTGAGCTCAGGAGTTCTAGGCTAGCCTGGGCAACATGATG
GCATACATTAGGGTCGTAAAAACCTCCAGTTTCGTCCGTCTAGTGAACCTCGAGTCCTCAAGATCCGATCGGACCCGTTGTACTAC

4335

ERBB4

ERBB4-202

ERBB4-202

ATCATCTCTAAAAAATGCAAAAATTAGCCAGGCATGGTGGCGCACCCCTGTGGTCCC GGCTACTCAGAGGCTAAGGTGGGAGGA
TAGTAGAGATTTTTTACGTTTTTAATCGGTCCGTACCACCGCGTGGGGACACCAGGGCCGATGAGTCTCCGATTCCACCCCTCCT

4420

ERBB4

ERBB4-202

ERBB4-202

TCACTTGAGCCTGGTAGGCAGAGATTGCAGTGAGCTGAGATTGTGCCATTGCACTCTAGCCTGGGTGACAGAGTGAGACCCTGTC
AGTGAACCTCGACCATCCGTCTCTAACGTCACTCGACTCTAACACGGTAACGTGAGATCGGACCCACTGTCTCACTCTGGGACAG

4505

ERBB4

ERBB4-202

ERBB4-202

TCAAAAAATAAATAAAAAATAAAAAATGAATAAGTATAGTACATCTTTAGATTAATTCACCTTTATGTATTTTATAAATTAACATATA
AGTTTTTTTATTTTATTTTATTTTACTTATTCATATCATGTAGAAATCTAATTAAGTGAAATACATAAAAAATTTTAATTGTATAT

4590

ERBB4

ERBB4-202

ERBB4-202

TTTATAGTTATAGTCATAAATTAACATATATTTATAGTTATAGTTATATCTATACACACATAATAAAAAAATATGATTAAGGCCA
AAATATCAATATCAGTATTTAATTGTATATAAATATCAATATCAATATAGATATGTGTGTATTATTTTTTTATACTAATTCCGGT

4675

ERBB4

ERBB4-202

ERBB4-202

GCCCAAAGACTCACATTTAGGAAATACATATAGAAATGAATTTTTAATGTAATTTTAAAACCTTTTACTTCTTACTTCTCTATAGA
CGGGTTTCTGAGTGTAATCCTTTATGTATATCTTTACTTAAAAATTACATTAAAATTTTGAAAATGAAGAATGAAGAGATATCT

4760

ERBB4

ERBB4-202

ERBB4-202

TGCCAATTAAATGGATGGCTCTGGAGTGTATACATTACAGGAAATTCACCCATCAGAGTGACGTTTGGAGCTATGGTAAATAAAT
ACGGTTAATTTACCTACCGAGACCTCACATATGTAATGTCTTTAAGTGGGTAGTCTCACTGCAAACCTCGATACCATTATTTTA

4845

ERBB4

ERBB4-202

885 890 895 900 905
M P I K W M A L E C I H Y R K F T H Q S D V W S Y

ENSE00000965161

ERBB4-202

CTTCTTTGCGAATTAAGCTTGTAAAGCAAAAATACATATGTTAAGTTCATGTGAAATATCTTAAGCTAAATTATTTTGTGTGT
GAAGAAACGCTTAATTTTGAACATTTTCGTTTTTATGTATACAATTC AAGTACACTTTATAGAATTCGATTTAATAAAACAACACA

4930

ERBB4

ERBB4-202

ERBB4-202

TATAAATACCTATTGATAAGCCTAATTTCTAAAGCAGTTAACTCTTTGCTTTCTCAATGAAAAAAAAATTTTTATTTTATTTT
ATATTTATGGATAACTATTCGGATTAAGGATTTTCGTCAATTGAGAAACGAAAGAGTTACTTTTTTTTTATAAAATAAAATAAAA

5015

ERBB4

ERBB4-202

ERBB4-202

ATTTTATTTTATTTTAAAGTTCTGCGATACACATGCAGAACCTGCAGGTTTGTGCGTAGGTATACATGTGGCATGGTGGTTTGCT
TAAATAAAATAAAATTC AAGACGCTATGTGTACGTCTTGGACGTCCAAACAACGCATCCATATGTACACCGTACCACCAAACGA

5100

ERBB4

ERBB4-202

ERBB4-202

GTACCTATCAACCCGTCATCTAGGTTTTAAGCCCTGCATGCATTAGGTATTTGTCCTAATGCTCTCCCTCCCTTGCCTCCATC
CATGGATAGTTGGGCAGTAGATCCAAAATTCGGGACGTACGTAATCCATAAACAGGATTACGAGAGGGAGGGGAACGGGAGGTAG

5185

ERBB4

ERBB4-202

ERBB4-202

CACCGACAGGCCCGATGTGTGATGTTCTCCTCCCTGTGTCCATGTGTTCCCATTTGAAGAGCAACAAAATATTCTAAATAGCATT
GTGGCTGTCCGGGGCTACACACTACAAGAGGAGGGACACAGGTACACAAGGGTAACCTCTCGTTGTTTTATAAGATTTATCGTAA

5270

ERBB4

ERBB4-202

ERBB4-202

GCTATCTGCCTTTTTCTGTTTTTTTTTTTTCTCGGTTTATTACAATGTAATATACTAATATTTCTGCTAAGATGTTTTCCATAA
CGATAGACGGAAAAAGACAAAAAAAAAAAAAAAAAGGACCAATAATGTTACATTATATGATTATAAAGACGATTCTACAAAAGGTATT

5355

ERBB4

ERBB4-202

ERBB4-202

GCTGTGGTTTTGTAGGAACTTGCCTGATCATTTTTGACAGAAAAAAAAAAAAATCAGCCAATTTTAGTTTAGGGACAATTTTCATAGA
CGACACCAAAACATCCTTGAACGGACTAGTAAAACGTCTTTTTTTTTTTTTTAGTCGGTTAAAATCAAATCCCTGTTAAAGTATCT

5440

ERBB4

ERBB4-202

ERBB4-202

ATTTTCATGGTGTTAATTTTTAAGCAACTTTCAAAAACATAACTCTGAATACAATAAATATTCAAACAAAAACAAAACCAACTTTTT
TAAAGTACCACAATTAATAATTCGTTGAAAAGTTTTGTATTGAGACTTATGTTATTTATAAGTTTGTTTTTGTTTTGGTTGAAAAA

5525

ERBB4

ERBB4-202

ERBB4-202

TGTGGGTTTTCTTGCATGTAAGAATTTATGTTCTATAGTAGAAAACAGATTATTGTCATAACAAAGAAAAATTACTGACAGCAGTA
ACACCCAAAGAACGTACATTCTTAAATACAAGATATCATCTTTTGTCTAATAACAGTATTGTTTCTTTTTAATGACTGTCGTCAT

5610

ERBB4

ERBB4-202

ERBB4-202

AGTTAGAGCAATGAACATGGTAAAAGAGAAGATTGCTAATTACAACATTAATTTTAATTTACAAACTACTTGTGGAGTTACAGAA
TCAATCTCGTTACTTGTACCATTTTCTCTTCTAACGATTAATGTTGTAATTAATAATTAATGTTTGATGAACACCTCAATGTCTT

5695

ERBB4

ERBB4-202

ERBB4-202

ATATTACAGAGTGAATAATATGAACTGGAAAAGAGTGACATTTATAATTAGAACATTTATTTTTATTGTGTTAACTTAATTGTTA
TATAATGTCTCACTTATTATACTTGACCTTTTCTCACTGTAATATTAATCTTGTAATAAAAAAACACAAATTGAATTAACAAT

5780

ERBB4

ERBB4-202

ERBB4-202

AGATGAGCTATTTAGCATCTGTCTGGCTACTTAAAATTTAAGTAAGTCCGGTAATACCAAGAAGGAGTCAATACGTTTCTAAGTT
TCTACTCGATAAATCGTAGACAGACCGATGAATTTTAAATTCATTCAGGCCATTATGGTTCTTCTCAGTTATGCAAAGATTCAA

5865

ERBB4

ERBB4-202

ERBB4-202

TAAATATATCATATAAAATTAGCATTCTTACAAATAAAAAGCATAATGCCCACTTAAATAAAAAGGGTGGTGGTGAGATTTAAAT
ATTTATATAGTATATTTAATCGTAAAGAATGTTTATTTTTCGTATTACGGGTGAATTTATTTTCCACCACCCTCTAAATTTA

5950

ERBB4

ERBB4-202

ERBB4-202

GTATGGTACAATTTATGTTACTCAAACCTTAAGCTTAAAAAAGTTTTACCTTTTTTGCATTGTTGGAAAAAAGATATAAAC
CATAACCATGTTAAATACAATGAGTTTGAATTCGAATTTTTTTTCAAATGGAAAAACGTAACAACCTTTTTTTTTTCTATATTTG

6035

ERBB4

ERBB4-202

ERBB4-202

CATTCAATCACTGAAGAACTTACAATTCTTATCTAGGAAAAATTAACTATCTTTAAAAAAGTATTTAAGACATTTCAATCAAGT
GTAAGTTAGTGACTTCTTGAATGTTAAGAATAGATCCTTTTTTAATTGATAGAAAATTTTTTCATAAATCTGTAAAGTTAGTTCA

6120

ERBB4

ERBB4-202

ERBB4-202

GGGTTATTCCTTCCACATATGTATTCCATAGGAGGTGGTAAAAATTTTCATGAAGGTTTCATGTGTTTTATTTACTCAGCTTAGAA
CCCAATAAGGAAGGTGTATACATAAGGTATCCTCCACCATTTTAAAAGTACTTCCAAAGTACACAAAATAAAATGAGTCGAATCTT

6205

ERBB4

ERBB4-202

ERBB4-202

ATAGAAAATGTCGTGTGTCTGAGGTATAGACAAATGTAGTGGAAATGCTTGACAAAACCTTACTTGCTAAACTATTGTAAGAAGTG
TATCTTTTACAGCACACAGACTCCATATCTGTTTACATCACCTTTACGAACTGTTTTGAATGAACGATTTGATAACATTCTTCAC

6290

ERBB4

ERBB4-202

ERBB4-202

TATAGAAAAACATCTATTGCATGTATTCTGTGATAACTTTATATATTATATGATACAGATTAGCATGTAGATTAGCATTTATACA
ATATCTTTTTGTAGATAACGTACATAAGACACTATTGAAATATATAATACTATGTCTAATCGTACATCTAATCGTAAATATGT

6375

ERBB4

ERBB4-202

ERBB4-202

TTACATGATATAGATAGGTTTATAGAATATATATTATGTCAGATTTATATATTATATCATATAGTATATTTTTATATATGTATATA
AATGTACTATATCTATCCAAATATCTTATATATAATACAGTCTAAATATATAATATAGTATATCATATAAAATATATACATATAT

6460

ERBB4

ERBB4-202

ERBB4-202

CTTTTTTCTTTTTCTTTCTACTTACAGTTCCTGAATCAAATATGGCAGTCTCCTGAAGGCAAATTTAAATTAGCTCAAGATATA
GAAAAAAGAAAAAGAAAGATGAATGTCAAGGGACTTAGTTTATACCGTCAGAGGACTTCCGTTTAAATTTAATCGAGTTCTATAT

6545

ERBB4

ERBB4-202

ERBB4-202

TAGGCAGTCTCCTGAAGGCAAATTTAAATTTAGCTCAAGATATATATAAACTGGGCAGAACAGTCATATTTTTAATAGTAAAATTT
ATCCGTCAGAGGACTTCCGTTTTAAATTTAATCGAGTTCTATATATATTTTGACCCGCTTGTGTCAGTATAAAAAATTATCATTTTTAAA

6630

ERBB4

ERBB4-202

ERBB4-202

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6715

ERBB4

ERBB4-202

ERBB4-202

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6800

ERBB4

ERBB4-202

ERBB4-202

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6885

ERBB4

ERBB4-202

ERBB4-202

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6970

ERBB4

ERBB4-202

ERBB4-202

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7055

ERBB4

ERBB4-202

ERBB4-202

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7140

ERBB4

ERBB4-202

ERBB4-202

ACAGTTGCTTTGTATCTTGCTTATGTTGGGAGTTCTGCTAGAAAATGTGAGAGTATCTACTCTATCTTTTATAACTACCTACCTAA
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7225

ERBB4

ERBB4-202

ERBB4-202

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7310

ERBB4

ERBB4-202

ERBB4-202

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7395

ERBB4

ERBB4-202

ERBB4-202

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7480

ERBB4

ERBB4-202

ERBB4-202

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7565

ERBB4

ERBB4-202

ERBB4-202

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7650

ERBB4

ERBB4-202

ERBB4-202

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7735

ERBB4

ERBB4-202

ERBB4-202

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7820

ERBB4

ERBB4-202

ERBB4-202

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7905

ERBB4

ERBB4-202

ERBB4-202

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7990

ERBB4

ERBB4-202

ERBB4-202

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8075

ERBB4

ERBB4-202

ERBB4-202

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8160

ERBB4

ERBB4-202

ERBB4-202

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8245

ERBB4

ERBB4-202

ERBB4-202

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8330

ERBB4

ERBB4-202

ERBB4-202

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8415

ERBB4

ERBB4-202

ERBB4-202

PCR Forward

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8500

ERBB4

ERBB4-202

ERBB4-202

PCR Forward

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8585

ERBB4

ERBB4-202

ERBB4-202

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8670

ERBB4

ERBB4-202

ERBB4-202

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8755

ERBB4

ERBB4-202

ERBB4-202

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8840

ERBB4

ERBB4-202

ERBB4-202

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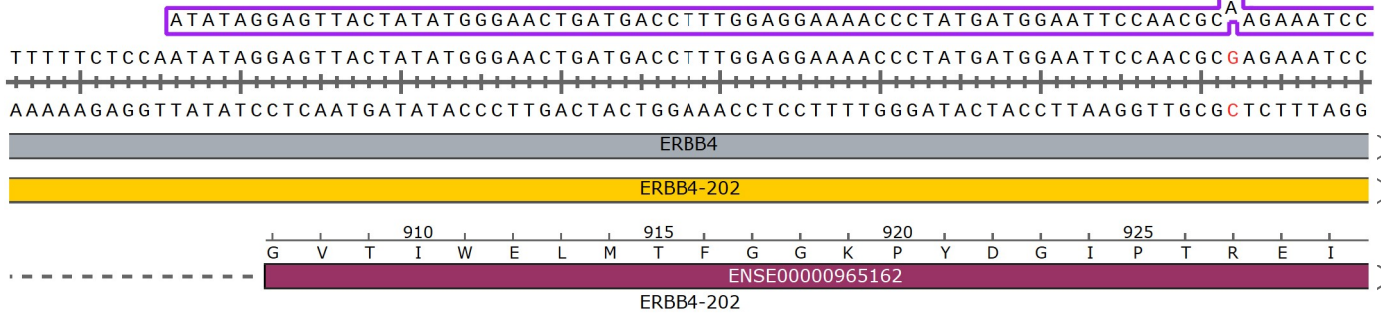
8925

ERBB4

ERBB4-202

ERBB4-202

Donor Template WT -> SNV



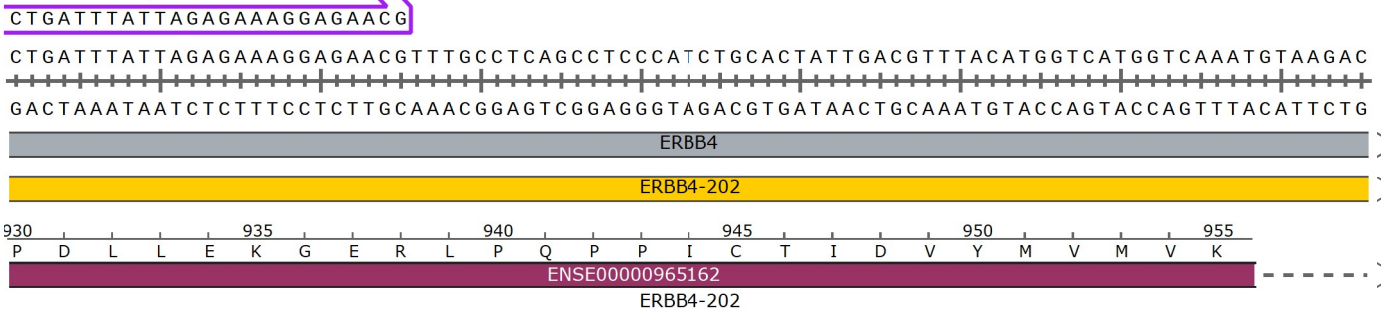
9010

PAM Protospacer Sequence

SNV

TGCGCTCTTTAGG
gRNA Protospacer

Donor Template WT -> SNV

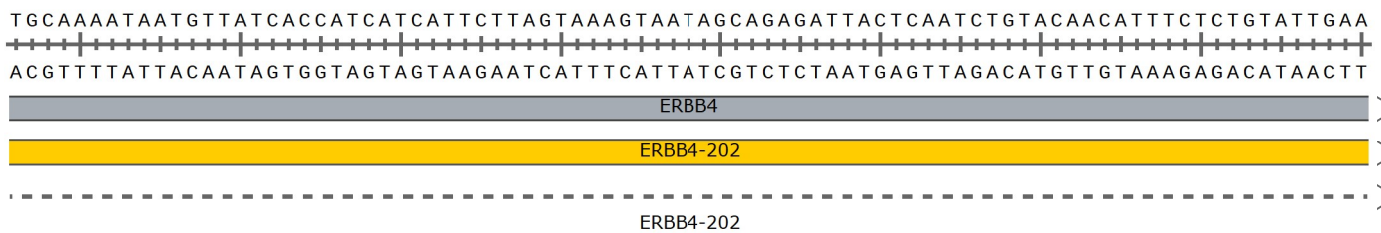


9095

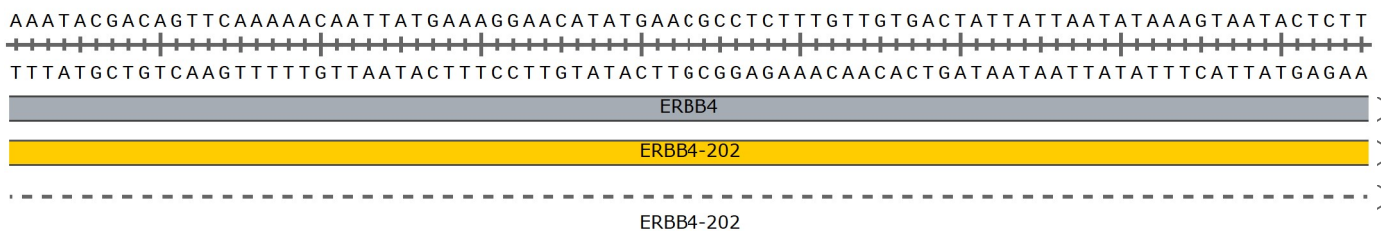
Protospacer Sequence

GACTAAA
gRNA Protospacer

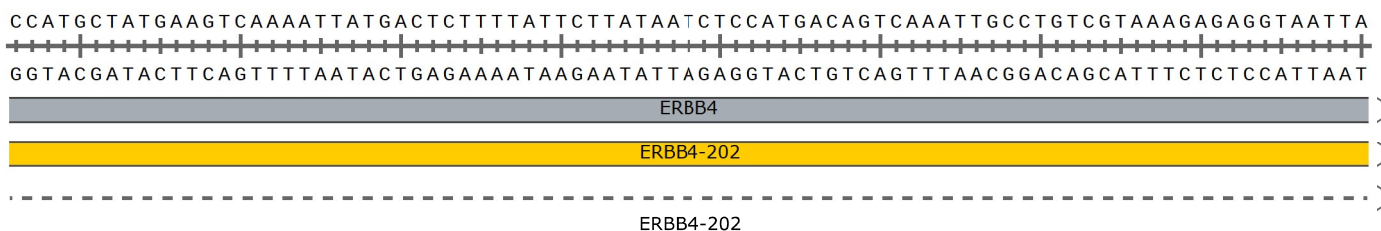
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Sanger Sequencing



9180



9265



9350

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9435

ERBB4

ERBB4-202

ERBB4-202

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9520

ERBB4

ERBB4-202

ERBB4-202

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9605

ERBB4

ERBB4-202

ERBB4-202

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PCR Reverse

CTAAAAAGATTATAAATGTTTACTTTTTTCAATTTGATCATTGTTTACATCAAACCTTTACTTTTTCTTTTTCTTCTATGTCC
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9690

ERBB4

ERBB4-202

ERBB4-202

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9775

ERBB4

ERBB4-202

ERBB4-202

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9860

ERBB4

ERBB4-202

ERBB4-202

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9945

ERBB4

ERBB4-202

ERBB4-202

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10,030

ERBB4

ERBB4-202

ERBB4-202

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10,115

ERBB4

ERBB4-202

ERBB4-202

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10,200

ERBB4

ERBB4-202

ERBB4-202

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10,285

ERBB4

ERBB4-202

ERBB4-202

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10,370

ERBB4

ERBB4-202

ERBB4-202

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10,455

ERBB4

ERBB4-202

ERBB4-202

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10,540

ERBB4

ERBB4-202

ERBB4-202

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10,625

ERBB4

ERBB4-202

ERBB4-202

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10,710

ERBB4

ERBB4-202

ERBB4-202

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10,795

ERBB4

ERBB4-202

ERBB4-202

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10,880

ERBB4

ERBB4-202

ERBB4-202

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10,965

ERBB4

ERBB4-202

ERBB4-202

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11,050

ERBB4

ERBB4-202

ERBB4-202

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11,135

ERBB4

ERBB4-202

ERBB4-202

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11,220

ERBB4

ERBB4-202

960 965 970 975 980
C W M I D A D S R P K F K E L A A E F S R M A R D P Q R

ENSE00001002882

ERBB4-202

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11,305

ERBB4

ERBB4-202

985
Y L V I Q

ENSE00001002882

ERBB4-202

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11,390

ERBB4

ERBB4-202

ERBB4-202

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11,475

ERBB4

ERBB4-202

ERBB4-202

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11,560

ERBB4

ERBB4-202

ERBB4-202

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11,645

ERBB4

ERBB4-202

ERBB4-202

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11,730

ERBB4

ERBB4-202

ERBB4-202

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11,815

ERBB4

ERBB4-202

ERBB4-202

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11,900

ERBB4

ERBB4-202

ERBB4-202

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11,985

ERBB4

ERBB4-202

ERBB4-202

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12,070

ERBB4

ERBB4-202

ERBB4-202

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12,155

ERBB4

ERBB4-202

ERBB4-202

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12,240

ERBB4

ERBB4-202

ERBB4-202

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12,325

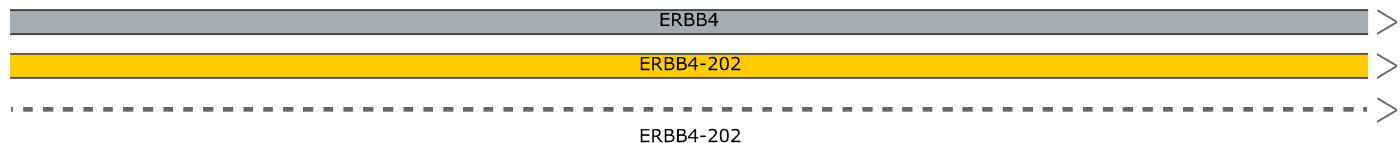
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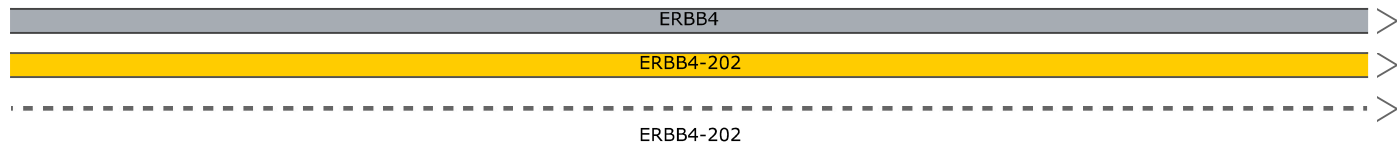
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12,410



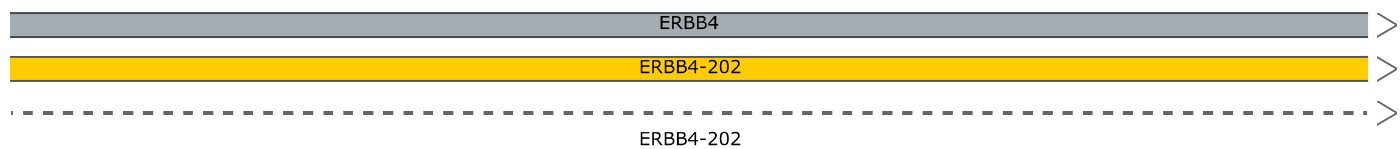
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12,495



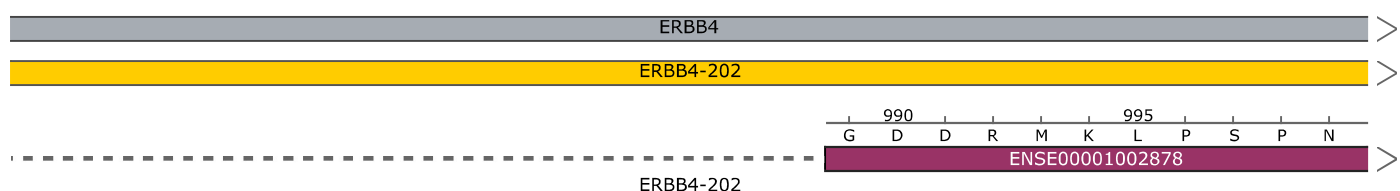
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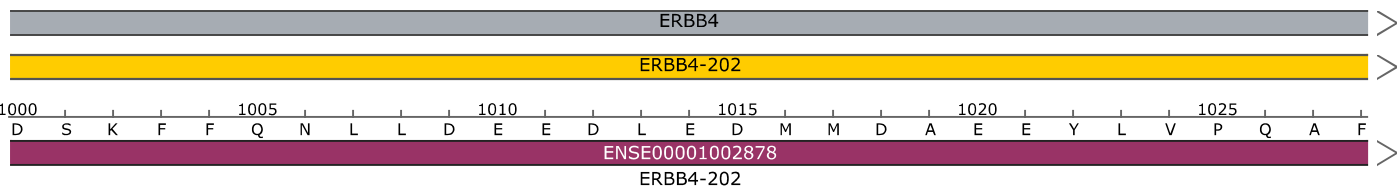
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12,665



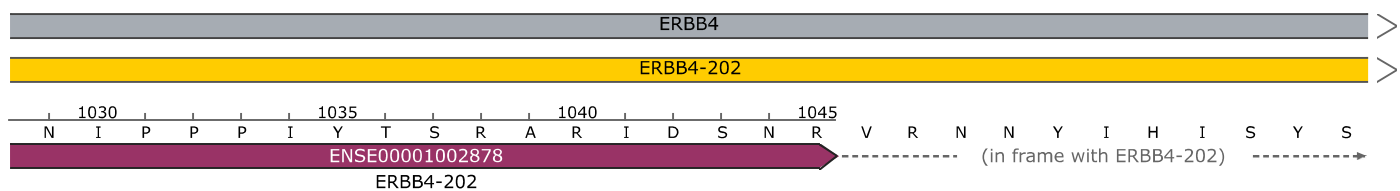
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12,750

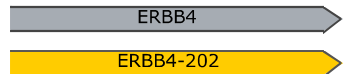


CAACATCCCACCTCCCATCTATACTTCCAGAGCAAGAATTGACTCGAATAGGGTAAGAAATAATTATATACACATATCATATTCT
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12,835



TTCTGAGATATAAAATCATGT 3'
AAGACTCTATATTTTAGTACA 5'



F

Feature	Location	Size		Type
✓ ERBB4	1 .. 12,856	12,856 bp	■ →	gene
/note	= gene ENSG00000178568 Protein coding			
ERBB4-201	1 .. 12,856	12,856 bp	■ →	prim_transcript
/note	= primary transcript ENST00000260943			
✓ ERBB4-202	1 .. 12,856	12,856 bp	■ →	prim_transcript
/note	= primary transcript ENST00000342788			
ERBB4-203	1 .. 12,856	12,856 bp	■ →	prim_transcript
/note	= primary transcript ENST00000402597			
ERBB4-205	1 .. 12,856	12,856 bp	■ →	prim_transcript
/note	= primary transcript ENST00000436443			
ERBB4-201	2143 .. 12,802	10,660 bp	■ →	CDS
▶ 5 segments	= 648 bp			
/note	= coding sequence ENSP00000260943			
/translation	= GMMYLEERRLVHRDLAARNVLVKSPNHVKITDFGLARLLEGDEKEYNADGGK,,MPIKWMALECIHYRKFTHQSDVWSY,,GVTIWELMTFGGKPY DGIPTREIPDLLEKGERLPQPPICTIDVYVMVVK,,CWMIDADSRPKFKELAAEF SRMARDPQRYLVIQ,,GDDRMKLPSPNDSKFFQ NLLDEEDLE DMDAHEYLEBQAENLRDYSRARSIDSNR			
✓ ERBB4-202	2143 .. 12,802	10,660 bp	■ →	CDS
▶ 5 segments	= 648 bp			
/note	= coding sequence ENSP00000342235			
/translation	= GMMYLEERRLVHRDLAARNVLVKSPNHVKITDFGLARLLEGDEKEYNADGGK,,MPIKWMALECIHYRKFTHQSDVWSY,,GVTIWELMTFGGKPY DGIPTREIPDLLEKGERLPQPPICTIDVYVMVVK,,CWMIDADSRPKFKELAAEF SRMARDPQRYLVIQ,,GDDRMKLPSPNDSKFFQ NLLDEEDLE DMDAHEYLEBQAENLRDYSRARSIDSNR			
ERBB4-203	2143 .. 12,802	10,660 bp	■ →	CDS
▶ 5 segments	= 648 bp			
/note	= coding sequence ENSP00000385565			
/translation	= GMMYLEERRLVHRDLAARNVLVKSPNHVKITDFGLARLLEGDEKEYNADGGK,,MPIKWMALECIHYRKFTHQSDVWSY,,GVTIWELMTFGGKPY DGIPTREIPDLLEKGERLPQPPICTIDVYVMVVK,,CWMIDADSRPKFKELAAEF SRMARDPQRYLVIQ,,GDDRMKLPSPNDSKFFQ NLLDEEDLE DMDAHEYLEBQAENLRDYSRARSIDSNR			
ERBB4-205	2143 .. 12,802	10,660 bp	■ →	CDS
▶ 5 segments	= 648 bp			
/note	= coding sequence ENSP00000403204			
/translation	= GMMYLEERRLVHRDLAARNVLVKSPNHVKITDFGLARLLEGDEKEYNADGGK,,MPIKWMALECIHYRKFTHQSDVWSY,,GVTIWELMTFGGKPY DGIPTREIPDLLEKGERLPQPPICTIDVYVMVVK,,CWMIDADSRPKFKELAAEF SRMARDPQRYLVIQ,,GDDRMKLPSPNDSKFFQ NLLDEEDLE DMDAHEYLEBQAENLRDYSRARSIDSNR			
✓ Donor Template WT -> SNV	8936 .. 9035	100 bp	■ ⇌	misc_feature
✓ PAM	8995 .. 8997	3 bp	■ ⇌	misc_feature
✓ Protospacer Sequence	8998 .. 9017	20 bp	■ ⇌	misc_feature
✓ SNV	9002 .. 9002	1 bp	■ ⇌	misc_feature
/note	= WT = G SNV = A			

Primer	Length	Binding Sites	Tm	Date Added
✓ PCR Forward	25-mer	8490 .. 8514	57°C	Jan 18, 2023
/sequence = CTGGAAGCCTTTTATAGCAAAGATG 40% GC / 7705.1 Da				
✓ Donor Template WT -> SNV	100-mer	8936 .. 9035	71°C	Jan 18, 2023
/sequence = ATATAGGAGTTACTATATGGGAACTGATGACCTTTGGAGGAAAACCCTATGATGGAATTCCAACGCAAGAAATCCCTGATTATTAGAGAA 45% GC / 10666.3 Da				
✓ gRNA Protospacer	20-mer	8998 .. 9017	57°C	Jan 18, 2023
/sequence = AAATCAGGGATTTCTCGCGT 45% GC / 6132.1 Da				
✓ Sanger Sequencing	21-mer	9075 .. 9095	53°C	Jan 18, 2023
/sequence = GTCTTACATTTGACCATGACC 43% GC / 6356.2 Da				
✓ PCR Reverse	25-mer	9548 .. 9572	59°C	Jan 18, 2023
/sequence = CTTGTCCTGCTAATTTGCTCCTGAC 48% GC / 7550.0 Da				