



INK2J00035R_CSF1R_A781E_B07_AA
8975 bp

5'

AAAAATATATATATATATTTGGATGGGAGGTTGGGTGGGTGGATGGATGGGTAGATGGATGGACAGATGAACGGATGGATAAGATC
TTTTATATATATATATAAACCTACCCTCCAACCCACCCACCTACCTACCCATCTACCTACCTGTCTACTTGCCTACCTATTCTAG

85

CSF1R

CSF1R-201

TCAAGTTCCACCCTCCCTCCTGGCTCAGGAATTACCAGATTATCAGAGATATCAGGGCCCTCAGAGGTTGTCTTGTCCAAGGTCT
AGTTCAAGGTGGGAGGGAGGACCGAGTCCTTAATGGTCTAATAGTCTCTATAGTCCCAGGAGTCTCCAACAGAACAGGTTCCAGA

170

CSF1R

CSF1R-201

TCAATACACAAATAGTGAAACAGGCTTGGAGAAGGGAAGGTACACACAACAAGGCAGAGTCAAGCAGGAACATGCTCTCAGTGCTA
AGTTATGTGTTTATCACTTTGTCCGAACCTCTTCCCTTCCAGTGTGTTGTTCCGTCTCAGTTTCGTCTTGTACGAGAGTCAAGAT

255

CSF1R

CSF1R-201

TGTTTCATGAGACGACCTCTCTCAGCCCAGAGCAGGCCTTGCCCTGCCTTCTCCCACTGGGCGCCTTGGGACTGCCACACCCCTG
ACAAGTACTCTGCTGGAGAGAGTCGGGTCTCGTCCGGAACGGGACGGAAGAGGGTGACCCGCGGAACCTGACGGGTGTGGGGAC

340

CSF1R

CSF1R-201

CTCTTGGGGGTCAGAAACAAGGTCCAGGAAGTGCCTGCCAGCCCCGACTGCCACGTGCTCCCTTCCCTTCTTCTGCAGAAAGCCCAAG
GAGAACCCCCAGTCTTTGTTCCAGGTCTTGACGGACGGTTCGGGGCTGACGGTGCACGAGGGAAGGAGAAGACGTCTTCGGGTTC

425

CSF1R

CSF1R-201

545
K P K
ENSE00003...
CSF1R-201

TACCAGGTCCGCTGGAAGATCATCGAGAGCTATGAGGGCAACAGTTATACTTTCATCGACCCACGCAGCTGCCTTACAACGAGA
ATGGTCCAGGCGACCTTCTAGTAGCTCTCGATACTCCCGTTGTCAATATGAAAGTAGCTGGGGTGCCTCGACGGAATGTTGCTCT

510

CSF1R

CSF1R-201

Y Q V R W K I I E S Y E G N S Y T F I D P T Q L P Y N E

ENSE00003547588

CSF1R-201

AGTGGGAGTTCCCCCGGAACAACCTGCAGTTTGGTGAGATGGCAGCTCATCACTCCACAGCTTCTATCACAGGGCCTGTGGGGG
TCACCCTCAAGGGGGCCTTGTGGACGTCAAACCACTCTACCGTCGAGTAGTGAGGTGTGGAAGGATAGTGTCCCGGACACCCCC

595

CSF1R

CSF1R-201

575 580
K W E F P R N N L Q F

ENSE00003547588

CSF1R-201

TTGCAGGGAGCCCATGGGCCCTTGGACAGAGGCCCTTTGGTGCCAGGGACTTAAGGGACCTGTGTGCGTGGCAGGTAAGACCCT
AACGTCCCTCGGGTACCCGGGAACCTGTCTCCGGGAAACCACGGGTCCCTGAATTCCTGGACACACGCACCGTCCATTCTGGGA

680

CSF1R

CSF1R-201

585
G K T L
ENSE0000359...

CSF1R-201

CGGAGCTGGAGCCTTTGGGAAGGTGGTGGAGGCCACGGCCTTTGGTCTGGGCAAGGAGGATGCTGTCTCTGAAGGTGGCTGTGAAAG
GCCTCGACCTCGGAAACCCCTCCACCACCTCCGGTGCCGGAACACAGACCCGTTCTCTCTACGACAGGACTTCCACCAGACTTC

765

CSF1R

CSF1R-201

590 595 600 605 610 615
G A G A F G K V V E A T A F G L G K E D A V L K V A V K

ENSE00003595569

CSF1R-201

ATGCTGAAGTGTGAGTGAGGGGAGGGGATGAGGGAAGGGATGGGGGGTGGTAGATGCTGGGGGTGGGCTGGCCCTGGTGTCACAA
TACGACTTCACACTCACTCCCTCCCTACTCCCTTCCCTACCCCCACCATCTACGACCCCCACCCGACCGGGACCACAGTGTT

850

CSF1R

CSF1R-201

M L K

ENSE0000359...

CSF1R-201

GAGGCATCACACACATTTCAACCTGTTGAAGCCTGGGGGACAGAGCTCAGGGGTGAGGACTTGGGTTTTCTTGTGAGCTCCAGGC
CTCCGTAGTGTGTGTAAGTTGGACAACCTTCGGACCCCTGTCTCGAGTCCCACTCCTGAACCCAAAAGAACACTCGAGGTCCG

935

CSF1R

CSF1R-201

CSF1R-201

ACCCTCTGACTCCCGGCTCCAAGAAGGTCTAGGTCACCCTTTAGTTGTGAAGGGGCTCCTGACTGAGCTCCAAAAAGTCTGGGGG
TGGGAGACTGAGGGCCGAGGTTCTTCCAGATCCAGTGGGAAATCAACACTTCCCGAGGACTGACTCGAGGTTTTTCAGACCCCC

1020

CSF1R

CSF1R-201

CSF1R-201

TGCAGAAAGGCCACCTATGGCCATGGCCTGGCCACAGTTTGGCTTCTGTACCTGAAGACCAGCTCAGTGACAGGCTCATCCCT
ACGTCTTCCGGTGGATACCGGTACCGGACCGGTGTCAAACCGAAGGACAGTGGACTTCTGGTCGAGTCACTGTCCGAGTAGGGA

1105

CSF1R

CSF1R-201

CSF1R-201

CCTCTCTCTCTCTGCCATCTGTGTGTCTGCATTTTTCTTCTCTCTTTTGGCTTCTGGTCACTCCGGGTCTTGGGGTATGC
GGAGAGAGAGAGAGACGGTAGACACACAGACGTA AAAAGGAAGAGGAAGAAAACCGAAGACCAGTGAGGCCCAAGAACCCCATACG

1190

CSF1R

CSF1R-201

CSF1R-201

CCTGCTTTCTCCCTGGGTCTCTGCATTTGGTCCCATGTATCTGTGTGGTGTCTCTGTCTCTGCTCTCCCTCTCCCTGTCTTTGGGAC
GGACGAAAAGAGGGGACCCAGAGACGTA AACACAGGGGTACATAGACACACCACGAGAGACAGGACGGGAGAGGGGACAGAAACCCCTG

1275

CSF1R

CSF1R-201

CSF1R-201

TGTGGTTCTTCTCCAGCCACGGCCCATGCTGATGAGAAGGAGGCCCTCATGTCCGAGCTGAAGATCATGAGCCACCTGGGCCA
ACACCAAGAAGGAGGGTTCGGTGCCGGGTACGACTACTCTTCTCCGGGAGTACAGGCTCGACTTCTAGTACTCGGTGGACCCGGT

1360

CSF1R

CSF1R-201

620 S T A H A D E K E A 625 630 M S E L K I M S H L G Q 640
ENSE00003586812

CSF1R-201

GCACGAGAACATCGTCAACCTTCTGGGAGCCTGTACCCATGGAGGTAAGGGCCTTGGGGTTCCTGGGGCCAAGGTCTTGGGGCCT
CGTGCTCTTGTAGCAGTTGGAAGACCCTCGGACATGGGTACCTCCATTCCCAGAACCCCAAGGACCCCGGTTCCAGAACCCCGGA

1445

CSF1R

CSF1R-201

645 H E N I V N L 650 G A C T 655 H G

ENSE00003586812

CSF1R-201

CTGGGGAATCTCAGGGCCCCAGGGCTACCTTGTTCGGTCTTCTCCTTCTCAGGATCCTACTGCTCCAAGTGTCAAGGGGATCCCG
GACCCCTTAGAGTCCCGGGTCCCGATGGAACAAGGCAGAAGAGGAAGAGTCTTAGGATGACGAGGTTACACAGTCCCCCTAGGGC

1530

CSF1R

CSF1R-201

CSF1R-201

GTCACAGCATCCCTTAAACTCCTGGGCCCATCTCCTGGAATAGTCAGGAGCTGCACGGGCAGCTTGAGGTATAAAGAGAGACTGA
CAGTGTCTAGGGAATTTGAGGACCCGGGTAGAGGACCTTATCAGTCTCGACGTGCCCGTCAACTCCATATTTCTCTCTGACT

1615

CSF1R

CSF1R-201

CSF1R-201

TAGGGAGCATCGGAGCCCTTGGAGGAGGAGATGAATGTGCAAGCTCCTAGGCCCTGCTTCCAGGGAGCCGGATCCTCTGGGTCTG
ATCCCTCGTAGCCTCGGGAACCTCCTCCTCTACTTACACGTTTCGAGGATCCGGGACGAAGGTCCCTCGGCCTAGGAGACCCAGAC

1700

CSF1R

CSF1R-201

CSF1R-201

GAGTGAAGCCCCCGCTACCTCTTATGAAGCTTCCATTCAAGGATGCTTGGACACTCTCCCCAGGGCCCCAAAGGTGCCCGG
CTCACTTCGGGGGGCGGATGGAGAATACTTCGAAGGTAAGTTTCTACGAACCTGTGAGAGGGGTCCCGGGGGTTTCCACGGGGCC

1785

CSF1R

CSF1R-201

CSF1R-201

GCTTTGCTGGGACTCCAAGTGCCCCACATCCTCTTCACTGATAGCAGCTCTGACCTACAGTGAGCCGCCATAGCTTTCTTTGAA
CGAAACGACCCTGAGGTTACGCGGGTGTAGGAGAAGTGACTATCGTCGAGACTGGATGTCACTCGGCCTGATCGAAAGGAACTT

1870

CSF1R

CSF1R-201

CSF1R-201

GAAATAATTCTTGGGCTACATTTTTTTTAAAGGTTGTCTTTTTTTTTTTCATTTTTTGTTTTTTTTTTCTTGAGACGGAGCCTCACT
CTTTATTAAGAACC CGATGTAAAAAATTCCAACAGAAAAAAGTAAAAACA AAAAAAAGA AACTCTGCCTCGGAGTGA

1955

CSF1R

CSF1R-201

CSF1R-201

CTGTCACCCAGGCTGGAGTGCAGTGGTGCATCTCGGCTCACTGCAACCTCTGCCTCCCAGGTTCAAGCAATTCTCCTGCCTCAA
GACAGTGGGTCCGACCTCACGTCAACACGCTAGAGCCGAGTGACGTTGGAGACGGAGGGTCCAAGTTCGTTAAGAGGACGGAGTT

2040

CSF1R

CSF1R-201

CSF1R-201

CCTCCTGAGTAGTTGGAAC TACAGGCACATGCCACCATGCCCGGCTGATTTTTTTGTATTTTTGTAGAGATGGGGTTTACCATG
GGAGGACTCATCAACCTTGATGTCCGTGTACGGTGGTACGGGCCGACTAAAAAACATAAAAAACATCTCTACCCCAAAGTGGTAC

2125

CSF1R

CSF1R-201

CSF1R-201

TTAGCCAGGATGGTCTCGATCTCCTGACCTCGTGATCCACCCACCTTGGCCTCCCAAAGTGCTGAGATTACAGGCATGAGCCACC
AATCGGTCTTACCAGAGCTAGAGGACTGGAGCACTAGGTGGGTGGAACCGGAGGGTTTACGACTCTAATGTCCGTA CTGCGTGG

2210

CSF1R

CSF1R-201

CSF1R-201

GTGCCCGCCAAAGCCATCTGTTTTAAACAAATGGAAC TACTGAGGCACAAGGAAACTTGCTCACAGAGCCGAGGTTAGA ACTCA
CACGGGGCGGTTTTCGGTAGACAAAATTTGTTTACCTTGATGACTCCGTGTTCTTTGAACGAGTGCTCTCGGCTCCAATCTTGAGT

2295

CSF1R

CSF1R-201

CSF1R-201

GCTATGCTGAGTCCAAGTCCAGTGGCCTCACTGCCCCAGTCTCATGCTCCTGTTTATGGAGGGGAGCACTCAGCACCTCCCTCA
CGATACGACTCAGGTT CAGGTCACCGGAGTGACGGGGGT CAGAGTACGAGGACAAGTACCTCCCTCGTGAGTCGTGGAGGGAGT

2380

CSF1R

CSF1R-201

CSF1R-201

CCCCACACCCTTGGCTGCTCTAGGCCCTGTACTGGTCATCACGGAGTACTGTTGCTATGGCGACCTGCTCAACTTTCTGCGAAGG
GGGGTGTGGGAACCGACGAGATCCGGGACATGACCAGTAGTGCTCATGACAACGATACCGCTGGACGAGTTGAAAGACGCTTCC

2465

CSF1R

CSF1R-201

G P V L V I T E Y C C Y G D L L N F L R R

ENSE00001023096

CSF1R-201

AAGGCTGAGGCCATGCTGGGACCCAGCCTGAGCCCCGGCCAGGACCCCGAGGGAGGGCGTCTGACTATAAGAACATCCACCTCGAGA
TTCCGACTCCGGTACGACCCTGGGTTCGGACTCGGGGCCGGTCTCTGGGGCTCCCTCCGCGAGCTGATATTCTTGTAGGTGGAGCTCT

2550

CSF1R

CSF1R-201

680 685 690 695 700 705
K A E A M L G P S L S P G Q D P E G G V D Y K N I H L E

ENSE00001023096

CSF1R-201

AGAAATATGTCCGCAGGTAGCCCCCTGGCAAAGGACAAGAAAAAGGCCAGGTCTGGGAGGCAGGATCCGAGTCTGTCTTCAAAGCC
TCTTTATACAGGCCTCCATCGGGGACCGTTTCTGTTCTTTTTCCGGTCCAGACCCCTCCGTCTTAGGCTCAGACAGAAGTTTCGG

2635

CSF1R

CSF1R-201

710
K K Y V R R

ENSE00001023096

CSF1R-201

AGCTCAGGGTTGGATGGCTCATGAATGGGTGGCTATGCAGCCCTCACCTGCCACCTGTGTCATGGGAAGTAGCCACCACAGGTTT
TCGAGTCCCAACCTACCGAGTACTTACCCACCGATACGTCGGGAGTGGACGGTGGACACAGTACCCTTCATCGGTGGTGTCCAAA

2720

CSF1R

CSF1R-201

CSF1R-201

TATGGCCATCTCTTGTCTCTACTCCTTTTCCCTTTCATTCAACAAATATTTGAACACCTACCGTGTCTGGGAGTGTGGAGGG
ATACCGGTAGAGAACAAGAGATGAGGAAAAGGGGAAGTAAGTTGTTTATAAAGTGTGGATGGCACAAGACCCCTCACACCTCCC

2805

CSF1R

CSF1R-201

CSF1R-201

CAAAGATGGGCAGCTCATAATCTGGTGGAGATATGCATCAATGAAATCACCCACCCAGTGTGTGTAAGATCAACCAAGATCTGT
GTTTCTACCCGTCGAGTATTAGACCCTCTATACGTAGTTACTTTAGTGGTGGGTACACACATTTTCTAGTTGGTTCTAGACA

2890

CSF1R

CSF1R-201

CSF1R-201

GCCTGGAGCCCTAGTAAGAGATGGGCAGATGTGGCCGGGTGCAGTGGCTCATGCCTGTAATCCAGCACTTTGGGAGGCTGAGGC
CGGACCTCGGGATCATTCTCTACCCGTCTACACCGGCCACGTCACCGAGTACGGACATTAGGGTTCGTGAAACCCCTCCGACTCCG

2975

CSF1R

CSF1R-201

CSF1R-201

GGGCAGATCACCTGAGGATGGGAGTTTCGAGACCAGCCTTACCAACAAGGTGAAACCCCGTCTCTATTAAATATACAAAATTAGCC
CCCGTCTAGTGGACTCCTACCCTCAAGCTCTGGTCCGAATGGTTGTTCCACTTTGGGGCAGAGATAATTTATATGTTTAAATCGG

3060

CSF1R

CSF1R-201

CSF1R-201

GGGCGTGGTGGCGCATGCCTATAATCCCAGCTACTCGGGAGGCTGAGGCGGGGAGAATTGCTTGAACCCAGGAGGCAGAGGTTGCT
CCCGCACCACCGCGTACGGATATTAGGGTCGATGAGCCCTCCGACTCCGCCCTCTTAACGAACTTGGGTCTCCGTCTCCAACGA

3145

CSF1R

CSF1R-201

CSF1R-201

GTGAGCTGAGATCACACCATTGCACTCCAGCCTGGGCAACAAGAATGAAACTCCGTCTCAAAAAAAAAAGAGAGATGGCTCTGTTG
CACTCGACTCTAGTGTGGTAACGTGAGGTCGGACCCGTTGTTCTTACTTTGAGGCAGAGTTTTTTTTTCTCTCTACCGAGACAAC

3230

CSF1R

CSF1R-201

CSF1R-201

TCCTGTTGCTGTGATTCTTGGAAAGCCATCCAGAACAGAGCCATCCAACAGACAGAGCCACATGGGGAACCAAGAGAGGAAGTGG
AGGACAACGACACTAAGGACCTTCGGTAGGTCTTGTCTCGGTAGGTTGTCTGTCTCGGTGTACCCCTTGGTTTTCTCTCCTTCACC

3315

CSF1R

CSF1R-201

CSF1R-201

GGAGATTCATGTCACACATGAGTCAGGGTTAGAGGTGGAGCCTGGACTAGAATCCTGCTCTCTTGACTTCCAGTCCAGGAGTCAC
CCTCTAAGTACAGTGTGTA CT CAGTCCCAATCTCCACCTCGGACCTGATCTTAGGACGAGAGAACTGAAGGTCAGGTCTCAGTG

3400

CSF1R

CSF1R-201

CSF1R-201

CCAAGCCACACTGCTGTCTCGGAGGTCTCTGTCTCAGGGGCTTGTGGGGTCAGGACAGGATCAGAACAAGAAGGGTGTACTACTGC
GGTTCGGTGTGACGACAGGACCTCCAGAGACAGAGTCCCCGAACACCCCAGTCCTGTCTTAGTCTTGTCTTCCCACATGTGACG

3485

CSF1R

CSF1R-201

CSF1R-201

GCCCTCATCCTAGATACTGTCAGCTGCCACGCCTGGGGAGGCAAAAGAGAAGGAGGCCATCTCTTACCCAGGGCCTTAAAAATG
CGGGAGTAGGATCTATGACAGTCGACGGTGC GGACCCCTCCGTTTTCTCTTCTCCTCCGGTAGAGAAGTGGGTCCCGGAATTTTTAC

3570

CSF1R

CSF1R-201

CSF1R-201

GGGGCCTGGCAGCATCACTTCTTCTGATTCCCTGACACTTCTATGAGGGTGGCACACACTAGGCCTCTGAAGATCAGATCAA
CCCCGGACCGTCTAGTGAAGGAGAAGACTAAGGGACTGTGAAGATACTCCACCGTGTGTGATCCGGAGACTTCTAGTCTAGTT

3655

CSF1R

CSF1R-201

CSF1R-201

AATGAGCACCAAAGGAAAAGTATTAGCTTCCATCTTCAAATACGCAGATGGGGAAAAGTATTCACAGAGTGGGTAATTTTCGAGGGCA
TTACTCGTGGTTTTCTTTTCATAATCGAAGGTAGAAGTTTATGCGTCTACCCCTTTTCATAAGGGTCTCACCCATTAAAGCTCCCCT

3740

CSF1R

CSF1R-201

CSF1R-201

AATGGCCTGTAAACCAACTCTGTCAAAGGATTCCAGGCTGTTAACGGAAGCATAGTTTCTACAAGGGAGCGGAAGGTTTTTTTCGG
TTACCGGACATTTGGTTGAGACAGTTTCTTAAGGTCCGACAATTGCCTTCGTATCAAAGATGTTCCCTCGCCTTCCAAAAAAGCC

3825

CSF1R

CSF1R-201

CSF1R-201

TTTCTCCTTCTGGGAACACTAGAAATATGGACATTGTCAAGGTACACATCTCTAGCGCAGAGGGGACAGGAGGGAGAGAGAAATCC
AAAGAGGAAGACCTTGTGATCTTATACCTGTAACAGTTCATGTGTAGAGATCGCGTCTCCCTGTCTCCTCCTCTCTTTAGG

3910

CSF1R

CSF1R-201

CSF1R-201

TATCTGGCTGGAACGTTAGGAGCAGTAGTGCTTCAGTCTACAGTAGTGCTTCTCAAATCTCTACCCCAAGTGTGCTCTCATAGG
ATAGACCGACCTTGCAATCCTCGTCATCACGAAGTCAGATGTTCATCACGAAGAGTTTAAGAGATGGGGTTCACACGAGAGTATCC

3995

CSF1R

CSF1R-201

CSF1R-201

CATCTCTTGAGGACTGTTGGAAGTGCACCACCTCAGGCCATCCACCCAGGCCCTGCTGATTCAAATCTGCATTGCAGAGATTCC
GTAGAGAACTCCTGACAACCTTACGTTGGTGGAGTCCGGGTAGGTGGGTCCGGACGACTAAGTTTTAGACGTAACGTCTCTAAGG

4080

CSF1R

CSF1R-201

CSF1R-201

CGGGGTGATTTATCTGCACATGAGTTGCAGCGTAAGCAGCACTGCTCTAGACCAGTGGGCCTCAGCTTAGGCTGTACTTTGTGAT
GCCCACTAAATAGACGTGTACTCAACGTCGCATTCGTGTCGACGAGATCTGGTACCCGGAGTCAATCCGACATGAAACACTA

4165

CSF1R

CSF1R-201

CSF1R-201

CACCTGGGGAGATTTAAATCTGTGAATGACTGTTTTGTCCCTAGAGTTTCTGAAGTATTAGTAATTAGCCTGATCCTAAAAGCTC
GTGGACCCCTCTAAATTTAGACACTTACTGACAAAACAGGGATCTCAAAGACTTCATAATCATTAAATCGGACTAGGATTTTCGAG

4250

CSF1R

CSF1R-201

CSF1R-201

CCGAAGTGATTTTAATGTGAAGCCAGGGGTGTGAGGCACTGTCCAGAGAAGAGAGGGGCACAAGGGGCCCTAGAATATGCCCCAAT
GGCTTCACTAAAATTACACTTCGGTCCCCACACTCCGTGACAGGTCTCTTCTCTCCCGTGTTCGCCGGGATCTTATACGGGGTTA

4335

CSF1R

CSF1R-201

CSF1R-201

TCTAGTAGGGCTGTTATGGGGAAGAGGACTCCAACCTTCTCTGTGGCCCTTGAGGGTAGAGCAGGGGCTAGGAGGAAAATCTCAGG
AGATCATCCCGACAATAACCCCTTCTCCTGAGGTTGAAGAGACACCGGGAACCTCCCATCTCGTCCCGATCCTCCTTTTAGAGTCC

4420

CSF1R

CSF1R-201

CSF1R-201

GGTAGATTGGCATTAGGAACAGTGAAGAACTTTCTCACAGGCAGAGCTGCCCAAACAGAAATGGGTTGTAAGCTCCCTCACCGG
CCATCTAACCGTAATCCTTGTCACTTCTTGAAAGAGTGTCCGTCTCGACGGGTTTTGGTCTTACCCAACATTTCGAGGGAGTGGCC

4505

CSF1R

CSF1R-201

CSF1R-201

GGACAGCCGAGCAGAGACCAATGCTCACTCAGATGGAGTGTGGCAGGAGGGTTTTCTTATCAGAAAGGGAGGTTCCAGTTGACCAT
CCTGTCTGGCTCGTCTCTGGTTACGAGTGAGTCTACCTCACACCGTCTCCCAAAGAATAGTCTTTCCCTCCAAGGTCAACTGGTA

4590

CSF1R

CSF1R-201

CSF1R-201

GGGGTGGTGGGTGGTCAAGGCCTGAGCTGAGCAGTGCAGTGATGATGAGTGACCTCTGCCCCCAACCCTCTCTCCTATGTAGGG
CCCCACCACCCACCAGTTCCGGACTCGACTCGTCCACGTCACCTACTACTCACTGGAGACGGGGGGTTGGGAGAGAGGATACATCCC

4675

CSF1R

CSF1R-201

CSF1R-201

ACAGTGGCTTCTCCAGCCAGGGTGTGGACACCTATGTGGAGATGAGGCCTGTCTCCACTTCTTCAAATGACTCCTTCTCTGAGCA
TGTCAACGAAGAGGTCGGTCCCACACCTGTGGATACACCTTACTCCGGACAGAGGTGAAGAAGTTTACTGAGGAAGAGACTCGT

4760

CSF1R

CSF1R-201

ENSE00003582642

CSF1R-201

AGGTGAGGAGGTCCCAGGGCCAGGCCCATTTGCTTGATAACAAGGGAAAAGGAGAAGGGGCTGCTGGGGTGAGGGGTGGGGAGT
TCCACTCCTCCAGGGTCCCGGTCCGGGGTAAACGAACCTATTGTTCCCTTTTCTCTTCCCGGACGACCCCACTCCCACCCCTCA

4845

CSF1R

CSF1R-201

CSF1R-201

D S G F S S Q G V D T Y V E M R P V S T S S N D S F S E Q

715

720

725

730

735

740

GTGGCAGGGGCTGCCCTGACGCCTCTTCCCACCTAGACCTGGACAAGGAGGATGGACGGCCCTGGAGCTCCGGGACCTGCTTCA
CACCGTCCCACGCGGACTGCGGAGAAGGGTGGGATCTGGACCTGTTCTCTACCTGCCGGGGACCTCGAGGCCCTGGACGAAGT

4930

CSF1R

CSF1R-201

D L D K E D G R P L E L R D L L H
ENSE00003499486

CSF1R-201

CTTCTCCAGCCAAGTAGCCAGGGCATGGCCTTCTCGCTTCCAAGAATGTGAGTAGGAACCTGGCCCTGGCTCATAGCCACCCA
GAAGAGGTCGGTTCATCGGGTCCCGTACCGGAAGGAGCGAAGGTTCTTACACTCATCCTTGGACCGGGACCGAGTATCGGTGGGT

5015

CSF1R

CSF1R-201

F S S Q V A Q G M A F L A S K N
ENSE00003499486

CSF1R-201

GGTCTGTGCTCCGGGGAGGCTGGATGAGTGACGATGGGGAGGAGGAAACGGGAGCCTGTGAGGGGGTAGGGGAGGAGACAGAGTA
CCAGACACGAGGCCCTCCGACCTACTCACTGCTACCCCTCCTCCTTTGCCCTCGGACACTCCCCATCCCCTCCTCTGTCTCAT

5100

CSF1R

CSF1R-201

CSF1R-201

TGAGAGAGTCATTTGGGCAGCAGCTGCAAGGATGAGTGGGAGAAAGCTGTGCCAGGGCTGGAGCTCTGGGGCTGGGCACCTGTG
ACTCTCTCAGTAAACCCGTCGTCGACGTTCTACTCACCTCTTTTCGACACGGGTCCCGACCTCGAGACCCCGACCCGTGGACAC

5185

CSF1R

CSF1R-201

CSF1R-201

TCCCAGCGTGAAGATGAGGAAGGGTACCAGGCTTTCTTCATTCGTTTTTACTAAATAGTGTATGAGAGACAACAGTTGTCTCTG
AGGGGTCGCACTTCTACTCCTTCCCATGGTCCGAAAGAAGTAAGCAAAAATGATTTATCACATACTCTCTGTTGTCAACAGAGAC

5270

CSF1R

CSF1R-201

CSF1R-201

CTCATAAAGCACGCGGTCTGGTGGGGATGATAACGGAAGCTTCTCAGAATTTTGGGGATATTAGATAACGTATAAAGTGCCTC
GAGTATTTCTGTCGCCAGACCACCCCTACTATTGCCTTCGAAGGAGTCTTAAAACCCCTATAATCTATTGCATATTTACGCGAG

5355

CSF1R

CSF1R-201

CSF1R-201

GGCCTAGGAAGAAGTGCCAGGGAATGGGAGCTCTTGCCATCTTCTTAGAACAGATTCGGGAGTCAGTGGTTTTGATTGTTGGCTC
CCGGATCCTTCTTACGGTCCCTTACCCTCGAGAACGGTAGAAGGAATCTTGTCTAAGCCCTCAGTCACCAAACCTAACAAACCGAG

5440

CSF1R

CSF1R-201

CSF1R-201

TGCCACCTGCTCCGTGACTTTAAGCAACTATTTAAATTTCTGTGCCTCAGTTTCTACACCTATAAAAAATGGGCATAACGATTGTTG
ACGGTGGACGAGGCACTGAAATTCGTTGATAAATTTAAGACACGGAGTCAAAGATGTGGATATTTTTTACCCGTATTGCTAACAAC

5525

CSF1R

CSF1R-201

CSF1R-201

PCR Forward

GAAAAAGGGTTCAATGTGTGCAGAG

AAAAGAAAAAGGGTTCAATGTGTGCAGAGTTTAGGGAAGGGCCTGGCAGATAGCAGCTGCTATGATCAGAAGTAACGGTAGGGTT
TTTTCTTTTTCCCAAGTTACACACGTCTCAAATCCCTTCCCGGACCGTCTATCGTCGACGATACTAGTCTTCATTGCCATCCCAA

5610

CSF1R

CSF1R-201

CSF1R-201

TGGAGACTGCTCTCTGCACGGAAGCCCTTCGCTTCTGGGGCCTGAGCAGACCAGTCAGAGGACAAAGGGTGAGAAGGGCCATGGC
ACCTCTGACGAGAGACGTGCCTTCGGGAAGCGAAGACCCCGGACTCGTCTGGTCAGTCTCCTGTTTCCCACTCTTCCCGGTACCG

5695

CSF1R

CSF1R-201

CSF1R-201

TGCTCAGGGTAATGGGGGTTTCTAAGCATTAAATGATCAGATCACGATACACATTCTCAGATCCTGGGCCCTGGTAGAAGGTATA
ACGAGTCCCATTACCCCCAAAGATTCGTAATTTACTAGTCTAGTGCTATGTGTAAGAGTCTAGGACCCGGGACCATCTTCCATAT

5780

CSF1R

CSF1R-201

CSF1R-201

Sanger Sequencing

GTTCACTCCAGCAGGGACTC

GACAAGGGTTTGTGGTAAAGGACCAAACTGTTGTTCACTCCAGCAGGGACTCCAAAGCCATGTGGGGCCCTCCCTGCCATCCTC
CTGTTCCCAAACACCATTTCCTGGTTTTGACAACAAGTGAGGTCGTCCCTGAGGTTTTCGGTACACCCCGGGAGGGACGGTAGGAG

5865

CSF1R

CSF1R-201

CSF1R-201

Donor Template SNV -> REV

AGGCTCAGGTAGGAGAAGGCCCAAGACTAACCTGCAGTGCTTTCCCTCAGTGCATCCACCGGGACGTGGCAGCGC

CTCACCTCAGGCTCAGGTAGGAGAAGGCCCAAGACTAACCTGCAGTGCTTTCCCTCAGTGCATCCACCGGGACGTGGCAGCGC
GAGTGGAGTCCGAGTCCATCCTCTTCCGGGTCTGATTGGGACGTACGAAAGGGAGTACGTTAGGTGGCCCTGCACCGTCCGCG

5950

CSF1R

CSF1R-201

775 780
C I H R D V A A R
ENSE00003511616

CSF1R-201

Donor Template SNV -> REV

Protospacer Sequence
PAM

SNV

CCTGCACCGTCCGCG
gRNA Protospacer

Donor Template SNV -> REV

TAACGTGCTGTTGACCAATGGTC

TAACGTGCTGTTGACCAATGGTCATGTGGCCAAGATTGGGGACTTCGGGCTGGCTAGGGACATCATGAATGACTCCAACTACATT
ATTGCACGACAACCTGGTTACCAAGTACACCGGTTCTAACCCCTGAAGCCCGACCGATCCCTGTAGTACTTACTGAGGTTGATGTAA

6035

CSF1R

CSF1R-201

785 790 795 800 805 810
N V L L T N G H V A K I G D F G L A R D I M N D S N Y I
ENSE00003511616
CSF1R-201

Donor Template SNV -> REV

Protospacer Sequence

ATTGC

gRNA Protospacer

GTC AAGGGCAATGTAAGTGCTGGGAGGGCTTGGGCCAGGCTG6GGAGGGGGTGAAGAGTCGGGGCCCAAATAACTGGGGACTGT
CAGTTCCTCCGTTACATTCACGACCCCTCCCGAACCCGGTCCGACCCCTCCCCACTTCTCAGCCCCGGGTTTTATTGACCCCTGACA

6120

CSF1R

CSF1R-201

V K G N
ENSE00003511616

CSF1R-201

CATCCAGGCCCGCCTGCCTGTGAAGTGGATGGCCCCAGAGA6CATCTTTGACTGTGTCTACACGGTTCAGAGCGACGTCTGGTC
GTAGGGTCCGGGCGGACGGACACTTACCTACCGGGGTCTCTCGTAGAAACTGACACAGATGTGCCAAGTCTCGCTGCAGACCAG

6205

CSF1R

CSF1R-201

815 820 825 830 835 840
A R L P V K W M A P E S I F D C V Y T V Q S D V W S
ENSE00003625490
CSF1R-201

CTATGGCATCCTCCTCTGGGAGATCTTCTCACTTGGTGAGCCACTGGGCCCACTCCAGGCAGAGCCTGGGGCTGGCTCCTCTGGT
GATACCGTAGGAGGAGACCCTCTAGAAGAGTGAACCACTCGGTGACCCGGGTGAGGTCCGTCTCGGACCCCGACCCGAGGAGACCA

6290

CSF1R

CSF1R-201

Y G I L L W E I F S L
845 850

ENSE00003625490

CSF1R-201

TGCCCACTGGTGGACAAAAGCTGTTTGGTGCCCAAGGACACAGCGAGGGTTGGTGAGAGTGCAGGAATGGGCAAGGGCTCTCGAAA
ACGGGGTGACCACCTGTTTCGACAAAACCACGGGTCCCTGTGTGCTCCCAACCACTCTCACGTCTTACCCGTTCCCGAGAGCTTT

6375

CSF1R

CSF1R-201

CSF1R-201

CCCAGCATCGTGGCTCCTGCGGGACTCGGCAGACCCTCTGCCCTGACAGGCGCTCCTTTCTGGCTCTTCCCTCGTTTGTCTCTG
GGGTGCTAGCACCGAGGACGCCCTGAGCCGTCTGGGAGACGGGGACTGTCCGCGAGGAAAGACCGAGAAGGGGAGCAAACAGAGAC

6460

CSF1R

CSF1R-201

CSF1R-201

GGGAGCAAACAGAGAC
PCR Reverse

CTCAGTTGCTGTTACCTGTTACCCTCCTTTGTCAGTGTTCCTCCTTTGTCTGAAATCTACAGACCCTTGAAGATGCAGCTCTC
GAGTCAACGACAATGGACAATGGGAGGAAACAGTGACAAAGGGAGGAAACAGACTTTAGATGTCTGGGAACTTCTACGTCGAGAG

6545

CSF1R

CSF1R-201

CSF1R-201

GAGTCAACG

PCR Reverse

TACTACTAGGCTCTAGTAGAAAGAACTGCTATTTCCCGAGGACTAGGCACAAGGACTTGTACTCAGTTCTTAAATACGCTGCTCC
ATGATGATCCGAGATCATCTTTCTTGACGATAAAGGGCTCCTGATCCGTGTTCTGAAACATGAGTCAAGAATTTATGCGACGAGG

6630

CSF1R

CSF1R-201

CSF1R-201

TATACCCTCATAACCACCTGACTGTCCACACTTTAACGATACACAGCTGAAGCTTTGGTCTGATTCCAAAGCCTGTGCAAGAATG
ATATGGGAGTATTGGTGGACTGACAGGTGTGAAATTGCTATGTGTGCGACTTCGAAACCAGACTAAGGTTTTCGGACACGTTCTTAC

6715

CSF1R

CSF1R-201

CSF1R-201

TTTGGTGTGATAAGGCCTGGATAGAGGCTCACACCTTCTAAAGCCTAAGCCTGCCACACACTGGCTGGCACACAGGAAGCACCG
AAACCACACTATTCCGGACCTATCTCCGAGTGTGGAAGGATTTCCGATTCCGGACGGTGTGTGACCCGACCGTGTGTCTTCCGTGGC

6800

CSF1R

CSF1R-201

CSF1R-201

GGTAAGAGTAGCTGCTGTTGCAAGTGGGACCCCTTTAAACCCAGTCTAAGATGTGTGTGGGTGTGCGGGAATGGGGA
CCATTCTCATCGACGACAACGTCACAACAGTTTACCCTGGGAAATTTGGGTGAGATTCTACACACACCCACACGCCCTTACCCCT

6885

CSF1R

CSF1R-201

CSF1R-201

GAAGACAATGGGCATGGCCTCTTACCTGATCTTGGCCTTTGCAAGGCTGAATCCCTACCCTGGCATCCTGGTGAACAGCAAGTTC
CTTCTGTTACCCGTACCGGAGAATGGACTAGAACCGGAAACGTCCCGACTTAGGGATGGGACCGTAGGACCACTTGTTCGTTCAAG

6970

CSF1R

CSF1R-201

G L N P Y P G I L V N S K F
ENSE00003691987

CSF1R-201

TATAAACTGGTGAAGGATGGATACCAAATGGCCAGCCTGCATTTGCCCAAAGAATATGTAAGCGAAGGGATCCCAGGGAGGGA
ATATTTGACCACTTCTACCTATGGTTTACCGGGTCGGACGTAAACGGGGTTTTCTTATACATTCGCTTCCCTAGGGTCCCTCCCT

7055

CSF1R

CSF1R-201

Y K L V K D G Y Q M A Q P A F A P K N I
ENSE00003691987

CSF1R-201

AAAGGACACCCAGGCTTTTCGCTGGAAAGGGATGGAAGGCCGTGTGGCCCTGATCTTTCCCTGTCCAAAATGTTCCAGGGTCAGA
TTTCCTGTGGGGTCCGAAAGCGACCTTTCCCTACCTTCCGGCACACCGGGACTAGAAAGGGACAGGTTTTACAAGGTCCAGTCT

7140

CSF1R

CSF1R-201

CSF1R-201

CTTTATCTCTCCCATAGTGGACACAACAAGCCCTTTTGGAGTTCAAGCTATGGGGGATGTTCTCAGAGAAGCAGCTGTTCACTAG
GAAATAGAGAGGGTATCACCTGTGTTGTTTCGGGGAAAACCTCAAGTTTCGATACCCCTACAAGAGTCTCTTCGTCGACAAGTGATC

7225

CSF1R

CSF1R-201

CSF1R-201

GGCTGGTCCCTAACCGACCACTTTTCTTTTTTTTTTTTTTTTTTTTTTTGAGACAGCATCTTGCTCTGTAGCCGGGCTGGAGCGCA
CCGACCAGGATTGGCTGGTGAAAAGGAAAAAAAAAAAAAAAAAAAAAACTCTGTCTGATAGAACGAGACATCGGGCCCCGACCTCGCGT

7310

CSF1R

CSF1R-201

CSF1R-201

GTGATGTGTGCAATCATAGCTCACTGCAGCCTCAATCTTTCAGGGCTCAAGCAATCCTTTGGCCTCAGCCTCCCAAACAGCTGGGA
CACTACACACGTTAGTATCGAGTGACGTCGGAGTTAGAAAGTCCCGAGTTCGTTAGGAAACCGGAGTTCGGAGGGTTTGTGACCCCT

7395

CSF1R

CSF1R-201

CSF1R-201

CTACAGGTGTGCACCACCAAGCCCAGCTATTTTTAAAAAATTTTTTAGTAGAGATGGGATCTCACTATGTTGTCCAGGCTGGTCT
GATGTCCACACGTGGTGGTTCGGGTCGATAAAAAATTTTTAAAAAATCATCTCTACCCTAGAGTGATACAACAGGTCCGACCAGA

7480

CSF1R

CSF1R-201

CSF1R-201

GGAACCTCCTGGCCTTATGCAATCCTCCTGCATCAACCTCCCAAAGTGTTGGGATTACAGGAATGAGCCACTGCACCTGTCCCTAA
CCTTGAGGACCGGAATACGTTAGGAGGACGTAGTTGGAGGGTTTTACAACCTAATGTCTTACTCGGTGACGTGGACAGGGATT

7565

CSF1R

CSF1R-201

CSF1R-201

ACAGACTTTTAAGAGATCGTTATTACAGTTACCCTGAGGATACCAAATGGCCTCATCTGTCAGAATGAGGGTGATGAGAGTACC
TGTCTGAAAATTCTCTAGCAATAATGTCAATGGGACTCCTATGGTTTTACCGGAGTAGACAGTCTTACTCCCCTACTCTCATGG

7650

CSF1R

CSF1R-201

CSF1R-201

CTTCTGCAAGGGTTACTGTGAGGATTAATGGTAAAGCATGCCAAGGACTTGGCATAGGTTTTATACTAAACTTACTTTGACTGG
GAAGACGTTCCAATGACACTCCTAATTTACCATTTTCGTACGGTTCCTGAACCGTATCCAAAATATGATTTGAATGAAACTGACC

7735

CSF1R

CSF1R-201

CSF1R-201

GTTTGGGGACCTCTGCTGGGTAGGTCTCTCTAGGGGTGTGTGTTAATGGCCCTGGACCCTAGGGAGCTGCCCATGGGCATCCTC
CAAACCCCTGGAGACGACCCATCCAGAGAGATCCCCACACACAATTACCGGGGACCTGGGATCCCTCGACGGGTACCCGTAGGAG

7820

CSF1R

CSF1R-201

CSF1R-201

TGTCCTATCTCCCAGATACAGCATCATGCAGGCCTGCTGGGCCTTGGAGCCCACCCACAGACCCACCTTCCAGCAGATCTGCTCC
ACAGGATAGAGGGTCTATGTCGTAGTACGTCCGGACGACCCGGAACCTCGGGTGGGTGTCTGGGTGGAAGGTCTGCTAGACGAGG

7905

CSF1R

CSF1R-201

Y S I M Q A C W A L E P T H R P T F Q Q I C S

ENSE00003647852

CSF1R-201

TTCTTCAGGAGCAGGCCCAAGAGGACAGGAGAGAGCGGGTGAGTGGGGTGAGGCTTGGGGTGGGTGGCCGGTAAAGCACGTTGG
AAGGAAGTCTCGTCCGGGTTCTCTGTCTCTCTCGCCACTCACCCACTCCGAACCCACCCACCGGCCATTTCTGTGCAACC

7990

CSF1R

CSF1R-201

F L Q E Q A Q E D R R E R

ENSE00003647852

CSF1R-201

GCTGGGCCTGATGGATCTGGACTGACAGTTTTCTGGTCCCTCCCACCCTCAGGACTATACCAATCTGCCGAGCAGCAGCAGAAGCG
CGACCCGGACTACCTAGACCTGACTGTCAAAGACCAGGGAGGGTGGGAGTCTGATATGGTTAGACGGCTCGTTCGTCTTTCGC

8075

CSF1R

CSF1R-201

D Y T N L P S S 925 930
ENSE00003627546

CSF1R-201

GTGGCAGCGGCAGCAGCAGCAGTGTGACTGGAGGAGGAGAGCTCTAGTGAGCACCTGACCTGCTGCGAGCAAGGGGATATCGCCCA
CACCGTCGCCGTCGTTCGTCACTCGACCTCCTCCTCTCGAGATCACTCGTGGACTGGACGACGCTCGTTCGCCCTATAGCGGGT

8160

CSF1R

CSF1R-201

G G 935 G S S S 940 S E L E E 945 S S S E 950 H L T C C 955 Q G D I 960 A Q
ENSE00003627546

CSF1R-201

GCCCTTGCTGCAGCCCAACAACACTATCAGTTTCTGCTGAGGAGTTGACGACAGGGAGTACCACTCTCCCCTCCACAAACTTCAACT
CGGGAACGACGTCGGGTTGTTGATAGTCAAGACGACTCCTCAACTGCTGTCCCTCATGGTGAGAGGGGAGGGTGTGGAAAGTTGA

8245

CSF1R

CSF1R-201

P L L Q 965 P N N Y Q F C 970
ENSE00003627546

CSF1R-201

CCTCCATGGATGGGGCGACACGGGGAGAACATACAAACTCTGCCTTCGGTCATTTCACTCAACAGCTCGGCCCAGCTCTGAAACT
GGAGGTACCTACCCCGCTGTGCCCTCTTGTATGTTTGGAGACGGAAGCCAGTAAAGTGAGTTGTGCGAGCCGGGTTCGAGACTTTGA

8330

CSF1R

CSF1R-201

TGGGAAGGTGAGGGATTCAGGGGAGGTCAGAGGATCCCACTTCTGAGCATGGGCCATCACTGCCAGTCAGGGGCTGGGGGCTGA
ACCCTTCCACTCCCTAAGTCCCCTCCAGTCTCCTAGGGTGAAGGACTCGTACCCGGTAGTGACGGTCAGTCCCCGACCCCGACT

8415

CSF1R

CSF1R-201

GCCCTCACCCCCCTCCCCTACTGTTCTCATGGTGTGGCCCTCGTGTGTTGCTATGCCAACTAGTAGAACCTTCTTTCTAATCC
CGGGAGTGGGGGGGAGGGGATGACAAGAGTACCACAACCGGAGCACAAACGATACGGTTGATCATCTTGGAAAGAAAGGATTAGG

8500

CSF1R

CSF1R-201

CCTTATCTTCATGGAAATGGACTGACTTTATGCCTATGAAGTCCCCAGGAGCTACACTGATACTGAGAAAACCAGGCTCTTTGGG
GGAATAGAAGTACCTTTACCTGACTGAAATACGGATACTTCAGGGGTCTCGATGTGACTATGACTCTTTTGGTCCGAGAAACCC

8585

CSF1R

CSF1R-201

GCTAGACAGACTGGCAGAGAGTGAGATCTCCCTCTCTGAGAGGAGCAGCAGATGCTCACAGACCACACTCAGCTCAGGCCCTTG
CGATCTGTCTGACCGTCTCACTCTAGAGGGAGAGACTCTCCTCGTCTGCTACGAGTGCTGGTGTGAGTTCGAGTCCGGGGAAAC

8670

CSF1R

CSF1R-201

GAGCAGGATGGCTCCTCTAAGAATCTCACAGGACCTCTTAGTCTCTGCCCTATACGCCGCTTCACTCCACAGCCTCACCCCTCC
CTCGTCCTACCGAGGAGATTCTTAGAGTGTCTGAGAGATCAGAGACGGGATATGCGGC GGAAGTGAGGTGTCTGGAGTGGGGAGG

8755

CSF1R

CSF1R-201

CACCCCATACTGGTACTGCTGTAATGAGCCAAGTGGCAGCTAAAAGTTGGGGGTGTTCTGCCAGTCCCGTCATTCTGGGCTAG
GTGGGGGTATGACCATGACGACATTACTCGGTTACCGTCGATTTTCAACCCCCACAAGACGGGTCAGGGCAGTAAGACCCGATC

8840

CSF1R

CSF1R-201

AAGGCAGGGGACCTTGGCATGTGGCTGGCCACACCAAGCAGGAAGCACAAACTCCCCAAGCTGACTCATCCTAACTAACAGTCA
TTCCGTCCCCTGGAACCGTACACCGACCGGTGTGGTTCGTCTTCGTGTTTGAGGGGGTTCGACTGAGTAGGATTGATTGTCAGT

8925

CSF1R

CSF1R-201

CGCCGTGGGATGTCTCTGTCCACATTAACAGCATTAAATGCAGTCA
GCGGCACCCCTACAGAGACAGGTGTAATTTGATTGTCGTAATTACGTCAGT

3'

8975

5'

CSF1R

CSF1R-201

Feature	Location	Size	Color	Symbol	Type
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/note	= gene ENSG00000182578 Protein coding				
✓ CSF1R-201	1 .. 8975	8975 bp	Yellow	→	prim_transcript
/note	= primary transcript ENST00000286301				
CSF1R-203	1 .. 8975	8975 bp	Grey	→	prim_transcript
/note	= primary transcript ENST00000504875 Nonsense mediated decay				
CSF1R-210	1 .. 8971	8971 bp	Grey	→	prim_transcript
/note	= primary transcript ENST00000675795				
CSF1R-206	1 .. 2488	2488 bp	Grey	→	prim_transcript
/note	= primary transcript ENST00000513609 Retained intron				
CSF1R-208	1 .. 2488	2488 bp	Grey	→	prim_transcript
/note	= primary transcript ENST00000515239 protein_coding_CDS_not_defined				
✓ CSF1R-201	417 .. 8197	7781 bp	Red	→	CDS
▶ 11 segments	= 1293 bp				
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CSF1R-207	598 .. 6240	5643 bp	Grey	→	prim_transcript
/note	= primary transcript ENST00000515068 Nonsense mediated decay				
✓ Donor Template SNV -> REV	5874 .. 5973	100 bp	Cyan	⊢	misc_feature
✓ PAM	5933 .. 5935	3 bp	Yellow	⊢	misc_feature
✓ Protospacer Sequence	5936 .. 5955	20 bp	Red	⊢	misc_feature
✓ SNV	5947 .. 5947	1 bp	Yellow	⊢	misc_feature
/note	= REV = C SNV = A				
CSF1R-204	7446 .. 8428	983 bp	Grey	→	prim_transcript
/note	= primary transcript ENST00000509861 Retained intron				

Primer	Length	Binding Sites	Tm	Date Added
✓ PCR Forward /sequence = GAAAAAGGGTTCAATGTGTGCAGAG 44% GC / 7819.2 Da	25-mer	5530 .. 5554	59°C	Jan 18, 2023
✓ Sanger Sequencing /sequence = GTTCACTCCAGCAGGGACTC 60% GC / 6078.0 Da	20-mer	5814 .. 5833	60°C	Jan 18, 2023
✓ Donor Template SNV -> REV /sequence = AGGCTCAGGTAGGAGAAGGCCCAAGACTAACCTGCAGTGCTTTCCCTCAGTGCATCCACCGGGACGTGGCAGCGCGTAACGTGCTGT 56% GC / 7783.1 Da	100-mer	5874 .. 5973	82°C	Jan 18, 2023
✓ gRNA Protospacer /sequence = CGTTACGCTCTGCCACGTCC 65% GC / 6004.9 Da	20-mer	5936 .. 5955	56°C	Jan 18, 2023
✓ PCR Reverse /sequence = GCAACTGAGCAGAGACAAACGAGGG 56% GC / 7783.1 Da	25-mer	6445 .. 6469	63°C	Jan 18, 2023