

Product datasheet for **RC402759**

MCSF Receptor (CSF1R) (NM_005211) Human Mutant ORF Clone

Product data:

Product Type:	Mutant ORF Clones
Product Name:	MCSF Receptor (CSF1R) (NM_005211) Human Mutant ORF Clone
Mutation Description:	Y969C
Affected Codon#:	969
Affected NT#:	2906
Nucleotide Mutation:	CSF1R Mutant (Y969C), Myc-DDK-tagged ORF clone of Homo sapiens colony stimulating factor 1 receptor (CSF1R) as transfection-ready DNA
Effect:	Myleoid malignancy, predisposition
Symbol:	CSF1R
Synonyms:	BANDDOS; C-FMS; CD115; CSF-1R; CSFR; FIM2; FMS; HDLS; M-CSF-R
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_005211
ORF Size:	2916 bp
Restriction Sites:	Sgfi-MluI



[View online »](#)

ORF Nucleotide Sequence:

>RC402759 representing NM_005211
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGCCAGGAGTTCTGCTGCTCTGCTGGTGGCCACAGCTTGGCATGGTCAGGAATCCCAGTGATAG
 AGCCCAGTGTCCCTGAGCTGGTCTGAAGCCAGGAGCAACGGTGACCTTGCATGTGTGGCAATGGCAG
 CGTGGAATGGGATGGCCCCCATCACCTCACTGGACCCTGTACTCTGATGGCTCCAGCAGCATCCTCAGC
 ACCAACACGCTACCTTCCAAAACACGGGGACCTATCGCTGCACTGAGCCTGGAGACCCCTGGGAGGCA
 GCGCCGCATCCACCTCTATGTCAAAGACCCTGCCCGCCCTGGAACGTGCTAGCACAGGAGGTGGTCTG
 GTTCGAGGACCAGGACGCACTACTGCCCTGTCTGCTCACAGACCCGGTGTGGAAGCAGGCGTCTCGCTG
 GTGCGTGTGCGTGGCCGGCCCTCATGCGCCACACCAACTACTCCTTCTCGCCCTGGCATGGCTTACCA
 TCCACAGGGCCAAGTTCATTAGAGCCAGGACTATCAATGCAGTGGCTGATGGTGGCAGGAAGGTGAT
 GTCCATCAGCATCCGGCTGAAAGTGCAGAAAGTATCCAGGGCCCCAGCCTTGACACTGGTGCCTGCA
 GAGCTGGTGGGATTGAGGGGAGGCTGCCAGATCGTGTGCTAGCCAGCAGCGTTGATGTTAACTTTG
 ATGCTTCTCCTCAACACAACAACACCAAGCTCGCAATCCCTCAACAATCTGACTTTCATAATAACCGTTA
 CAAAAAGTCTGACCCTCAACCTCGATCAAGTAGATTTCAAACATGCCGGCAACTACTCCTGCGTGGCC
 AGCAACGTGCAGGGCAAGCACTCCACCTCCATGTTCTTCCGGGTGGTAGAGAGTGCCTACTTGAACCTGA
 GCTCTGAGCAGAACCTCATCCAGGAGGTGACCGTGGGGAGGGGCTCAACCTCAAAGTATGGTGGAGGC
 CTACCCAGGCCTGCAAGTTTAACTGGACCTACCTGGGACCCCTTCTGACCACCAGCCTGAGCCCAAG
 CTTGCTAATGCTACCACCAAGGACACATACAGGCACACCTTACCCTCTCTGCCCCGCTGAAGCCCT
 CTGGCTGGCCGCTACTCCTTCTGGCCAGAAACCCAGGAGGCTGGAGAGCTTGACGCTTTGAGCTCAC
 CCTTCGATACCCCCAGAGGTAAGCGTCATATGGACATTCATCAACGGCTCTGGCACCCCTTTTGTGTCT
 GCCTCTGGGTACCCCAAGCCAGCTGACATGGCTGCAGTGCAGTGGCCACACTGATAGGTGTGATGAGG
 CCCAAGTGTGCAGGTCTGGGATGACCCATACCCTGAGGTCTGAGCCAGGAGCCCTTCCACAAGGTGAC
 GGTGCAGAGCCTGCTGACTGTTGAGACCTTAGAGCACAACCAACCTACGAGTGCAGGGCCACAAACAGC
 GTGGGGAGTGGCTCTGGGCCTTCAACCCATCTGCAAGGAGCCACACGCATCCCCGGATGAGTTCC
 TCTTACACCAGTGGTGGTGCCTGCATGTCCATCATGGCCTTGTCTGCTGCTGCTCCTGCTGCTATT
 GTACAAGTATAAGCAGAAGCCCAAGTACCAGTCCGCTGGAAGATCATCGAGAGCTATGAGGGCAACAGT
 TATACTTTCATCGACCCACGCAGCTGCCTTACAACGAGAAGTGGGAGTTCCTCCCGGAACACCTGCAGT
 TTGGTAAGACCCCTCGGAGCTGGAGCCTTTGGGAAGGTGGTGGAGGCCACGGCCTTTGGTCTGGGCAAGGA
 GGATGCTGTCTGAAGGTGGCTGTGAAGATGCTGAAGTCCACGGCCCATGCTGATGAGAAGGAGGCCCTC
 ATGTCCGAGCTGAAGATCATGAGCCACCTGGGCCAGCAGGAGAACATCGTCAACCTTCTGGGAGCCTGTA
 CCCATGGAGGCCCTGACTGGTTCATCACGGAGTACTGTTGCTATGGCGACCTGCTCAACTTTCTGCGAAG
 GAAGGCTGAGGCCATGCTGGGACCCAGCCTGAGCCCCGGCCAGGACCCCGAGGGAGGCGTCTGACTATAAG
 AACATCCACCTCGAGAAGAAATATGTCGCGAGGACAGTGGCTTCTCCAGCCAGGGTGTGGACACCTATG
 TGGAGATGAGGCTGTCTCCACTTCTCAAATGACTCCTTCTGAGCAAGACCTGGACAAGGAGGATGG
 ACGCCCCCTGGAGCTCCGGGACCTGCTTCACTTCTCCAGCCAAGTAGCCAGGGCATGGCCTTCTCGCT
 TCCAAGAATTGCATCCACCGGACGTGGCAGCGTAACGTGCTGTTGACCAATGGTTCATGTGGCCAAGA
 TTGGGGACTTCGGGCTGGCTAGGACATCATGAATGACTCCAACCTACATTGTCAAGGGCAATGCCCGCT
 GCCTGTGAAGTGGATGGCCCCAGAGAGCATCTTTGACTGTGTCTACACGGTTCAGAGCGACGTCTGGTCC
 TATGGCATCCTCCTCTGGGAGATCTTCTCACTTGGGCTGAATCCCTACCCTGGCATCCTGGTGAACAGCA
 AGTTCTATAAACTGGTGAAGGATGGATACCAAATGGCCAGCCTGCATTTGCCCCAAAGAATATACAG
 CATCATGCAGGCTGTGGGCTTGGAGCCACCCACAGACCCACCTTCCAGCAGATCTGCTCCTCCTT
 CAGGAGCAGGCCAAGAGGACAGGAGAGAGCGGACTATACCAATCTGCCGAGCAGCAGAGAAGCGGTG
 GCAGCGCAGCAGCAGCAGTGTGAGCTGGAGGAGGAGAGCTAGTGTGACCTGACCTGCTGCGAGCAAGG
 GGATATCGCCAGCCCTTGTGACGCCAACAACTGTCAAGTCTGCTG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGA TAAGGTTTAA

Protein Sequence: >RC402759 representing NM_005211
 Red=Cloning site Green=Tags(s)

MGPGVLLLLLVATAWHGQGIPVIEPSVPELVVKPGATVTLRCVNGSVEWDGPPSPHWTLYSDGSSSILS
 TNNATFQNTGTyrCTEPGDPLGGSAAIHLVYKDPARPWNVLAQEVVVFEDQDALLPCLLTDPVLEAGVSL
 VRVVRGRPLMRHTNYSFSPWHGFTIHRAKFIQSQDYQCSALMGGGRKVMSSIRLKVQKVIIPGPPALTLVPA
 ELVVRIRGEAAQIVCSASSVDVNFDFVFLQHNNTKLAIPQQSDFHNNRYQKVLTLNLDQVDFQHAGNYSVA
 SNVQGGKSTSMFFRVVESAYLNLSSSEQNLIQEVTVGEGLNLKVMVEAYPGLQGFNWTYLGPFSDHQPEPK
 LANATTKDtyrHTFTLSLPRLPSEAGRYsFLARNPGGWRALTFELTLRYPPPEVSVIWTfINGSGTLLCA
 ASGYPPQNVTLQCSGHTDRCDEAQLVQVDDPYPEVLSQEPFHKVTVQSLLTVETLEHNQTYECRAHNS
 VGSGSWAFIPISAGAHTPPDEFLLFTPVVACMSIMALLLLLLLLLLLYKYKQPKYQVRWKIIESYEGNS
 YTFIDPTQLPYNEKWEFPRNLLQFGKTLGAGAFGKVVVEATAFGLGKEDAVLKVAVKMLKSTAHADKEAL
 MSELKIMSHLGHENIVNLLGACTHGGPVLVITEYCCYDGLLNFLRRKAEAMLGPSLSPGQDPEGGVDYK
 NIHLKYYVRRDSGFSSQGVDTYVEMRPVSTSSNDSFSEQDLKEDGRPLELRDLLHFSSQVAQGMFLA
 SKNCIHRDVAARNVLLTNGHVAKIGDFGLARDIMNDSNYIVKGNARLPVKWMAPEsIFDCVYTVQSDVWS
 YGILLWEIFSLGLNPYPGILVNSKFYKLVKDGyQMAQPAFAPKNIYSIMQACWALEPThRPTfQQICSFL
 QEQAQEDRRERDYTNLPSSSRSGSGSSSSELEEESSSEHLTCCEQGDIAQPLLPNNCQFC

SGPTRRRL**EQKLISEEDLAANDILDYKDDDDK**V

Restriction Sites:

Sgfi-MluI

Cloning Scheme:



OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info</p>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
RefSeq:	NP_005202
RefSeq Size:	2916 bp
RefSeq ORF:	2919 bp
Locus ID:	1436
Cytogenetics:	5q32
Domains:	pkinase, TyrKc, S_TKc, ig, IGc2, IG
Protein Families:	Druggable Genome, Protein Kinase, Transmembrane
Protein Pathways:	Cytokine-cytokine receptor interaction, Endocytosis, Hematopoietic cell lineage, Pathways in cancer
MW:	106.9 kDa
Gene Summary:	<p>The protein encoded by this gene is the receptor for colony stimulating factor 1, a cytokine which controls the production, differentiation, and function of macrophages. This receptor mediates most if not all of the biological effects of this cytokine. Ligand binding activates the receptor kinase through a process of oligomerization and transphosphorylation. The encoded protein is a tyrosine kinase transmembrane receptor and member of the CSF1/PDGF receptor family of tyrosine-protein kinases. Mutations in this gene have been associated with a predisposition to myeloid malignancy. The first intron of this gene contains a transcriptionally inactive ribosomal protein L7 processed pseudogene oriented in the opposite direction. Alternative splicing results in multiple transcript variants. Expression of a splice variant from an LTR promoter has been found in Hodgkin lymphoma (HL), HL cell lines and anaplastic large cell lymphoma. [provided by RefSeq, Mar 2017]</p>