CSFR Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	CSFR, Polyclonal Antibody
Full Product Name	CSFR (Ab-809) Antibody
Product Gene Name	anti-CSFR antibody
Product Synonym Names	CD115; CSF-1-R; CSF1R; CSFMR; EC 2.7.10.1
Clonality	Polyclonal
Isotype	Rabbit IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purity/Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Specificity	The antibody detects endogenous levels of total CSFR protein
Preparation and Storage	Store at 4 degree C short term. Aliquot and store at -20 degree C long term. Avoid freeze/thaw cycles.
Molecular Weight	107,984 Da
Chromosome Location	Chromosome: 5; NC_000005.9 (149432854..149492935, complement). Location: 5q32
OMIM	164770
3D Structure	ModBase 3D Structure for P07333
Immunogen	Synthesized non-phosphopeptide derived from human CSFR around the phosphorylation site of tyrosine 809 (S-N-Y (p)-I-V).
Product Categories/Family for anti-CSFR antibody	Primary Antibody
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-CSFR antibody	Western Blot (WB), Immunohistochemistry (IHC), Immunofluorescence (IF)
Application Notes for anti-CSFR antibody	WB: 1:500~1:3000 IHC: 1:50~1:100 IF: 1:100~1:500

Related Product Information for anti-CSFR antibody	Tyrosine-protein kinase that acts as cell-surface receptor for CSF1 and IL34 and plays an essential role in the regulation of survival, proliferation and differentiation of hematopoietic precursor cells, especially mononuclear phagocytes, such as macrophages and monocytes. Promotes the release of proinflammatory chemokines in response to IL34 and CSF1, and thereby plays an important role in innate immunity and in inflammatory processes. Plays an important role in the regulation of osteoclast proliferation and differentiation, the regulation of bone resorption, and is required for normal bone and tooth development. Required for normal male and female fertility, and for normal development of milk ducts and acinar structures in the mammary gland during pregnancy. Promotes reorganization of the actin cytoskeleton, regulates formation of membrane ruffles, cell adhesion and cell migration, and promotes cancer cell invasion. Activates several signaling pathways in response to ligand binding. Phosphorylates PIK3R1, PLCG2, GRB2, SLA2 and CBL. Activation of PLCG2 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate, that then lead to the activation of protein kinase C family members, especially PRKCD. Phosphorylation of PIK3R1, the regulatory subunit of phosphatidylinositol 3-kinase, leads to activation of the AKT1 signaling pathway. Activated CSF1R also mediates activation of the MAP kinases MAPK1/ERK2 and/or MAPK3/ERK1, and of the SRC family kinases SRC, FYN and YES1. Activated CSF1R transmits signals both via proteins that directly interact with phosphorylated tyrosine residues in its intracellular domain, or via adapter proteins, such as GRB2. Promotes activation of STAT family members STAT3, STAT5A and/or STAT5B. Promotes tyrosine phosphorylation of SHC1 and INPP5D/SHIP-1. Receptor signaling is down-regulated by protein phosphatases, such as INPP5D/SHIP-1, that dephosphorylate the receptor and its downstream effectors, and by rapid internalization of the activated receptor.
Product References and Citations for anti-CSFR antibody	Hampe A., Oncogene Res. 4:9-17 (1989).Coussens L., Nature 320:277-280 (1986).Andre C., Genomics 39:216-226 (1997)
Other Notes	Small volumes of anti-CSFR antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CSFR purchase	MBS8586762 is an antibody targeting CSFR. Also known as CSFR (Ab-809) Antibody. Reactive in Human. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CSFR. It may not necessarily be applicable to this product.

NCBI GI #	27262659
NCBI GeneID	1436
NCBI Accession #	NP_005202.2
UniProt Primary Accession #	P07333
UniProt Secondary Accession #	Q6LDW5; Q6LDY4; Q86VW7; D3DQG2
UniProt Related Accession #	P07333
GenBank Nucleotide #	NM_005211.3
NCBI Official Full Name	macrophage colony-stimulating factor 1 receptor
NCBI Official Synonym Full Names	colony stimulating factor 1 receptor
NCBI Official Symbol	CSF1R
NCBI Official Synonym Symbols	FMS; CSFR; FIM2; HDLS; C-FMS; CD115; CSF-1R; M-CSF-R
UniProt Protein Name	Macrophage colony-stimulating factor 1 receptor
UniProt Synonym Protein Names	CSF-1 receptor (EC:2.7.10.1); CSF-1-R; CSF-1R; M-CSF-R; Proto-oncogene c-Fms; CD_antigen: CD115
UniProt Gene Name	CSF1R
UniProt Synonym Gene Names	FMS; CSF-1-R; CSF-1R; M-CSF-R
UniProt Entry Name	CSF1R_HUMAN

NCBI Protein Information	macrophage colony-stimulating factor 1 receptor; CD115 antigen; CSF-1 receptor; FMS proto-oncogene; proto-oncogene c-Fms; macrophage colony stimulating factor I receptor; McDonough feline sarcoma viral (v-fms) oncogene homolog
NCBI Summary for CSFR	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. [provided by RefSeq, Jul 2008]
UniProt Comments for CSFR	CSFR: an oncogenic tyrosine kinase receptor for CSF-1 (M-CSF). Drives growth and development of monocytes. Binding of CSF-1 induces receptor dimerization, activation and autophosphorylation of cytoplasmic tyrosine residues used as docking sites for SH2-containing signaling proteins. There are at least five major tyrosine autophosphorylation sites. Two point mutations seen in 10-20% of patients with acute myeloid leukemia, chronic myelomonocytic leukemia or myelodysplasia. One mutation appears to be both somatic and germline, and disrupts Cbl binding and receptor turnover. v-fms lacks the Cbl binding site and causes feline leukemia. Mutations may also develop after chemotherapy for lymphoma. A distinct point mutation was found in some cases of hepatocellular carcinoma and related to increased expression, and another mutation was found in 2 of 40 patients with idiopathic myelofibrosis. Expression is elevated in breast tumors and cell lines, and expression in xenografts and transgenic mice has been correlated with xenograft growth and breast cancer development. Inhibitors: Ki-20227 and other Kit/PDGFR inhibitors. Protein type: Protein kinase, TK; Protein kinase, tyrosine (receptor); Oncoprotein; Kinase, protein; EC 2.7.10.1; Membrane protein, integral; TK group; PDGFR family Chromosomal Location of Human Ortholog: 5q32 Cellular Component: cell surface; integral to plasma membrane; plasma membrane; receptor complex Molecular Function: macrophage colony stimulating factor receptor activity; protein homodimerization activity; cytokine binding; protein phosphatase binding; ATP binding Biological Process: regulation of bone resorption; peptidyl-tyrosine phosphorylation; phosphoinositide-mediated signaling; macrophage differentiation; monocyte differentiation; multicellular organismal development; cytokine and chemokine mediated signaling pathway; protein amino acid autophosphorylation; osteoclast differentiation; signal transduction; positive regulation of tyrosine phosphorylation of Stat3 protein; cell proliferation; regulation of cell shape; positive regulation of cell proliferation; ruffle organization and biogenesis; innate immune response; hemopoiesis; phosphatidylinositol metabolic process; positive regulation of protein amino acid phosphorylation; inflammatory response; intercellular junction maintenance; transmembrane receptor protein tyrosine kinase signaling pathway; positive regulation of cell migration Disease: Leukoencephalopathy, Diffuse Hereditary, With Spheroids
Research Articles on CSFR	**1.** Data indicate that blood treated with EDTA and refrigerated maintained CD115 stability.
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