

Mouse anti-Human CSF1R Monoclonal Antibody | anti-CSF1R antibody

CSF1R Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA283572	Mouse	Human	Immunohistochemistry, Flow Cytometry, Functional Assay, ELISA, Western Blot

PRODUCT SYNONYMS

CSF1R; Monoclonal Antibody; CSF1R Antibody; Macrophage colony-stimulating factor 1 receptor; CSF-1 receptor; CSF-1-R; CSF-1R; M-CSF-R; Proto-oncogene c-Fms; CD115; FMS; anti-CSF1R antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1,k
Clone Number	1486CT328.53.37
Specificity	This CSF1R antibody is generated from a mouse immunized with a recombinant protein.
Purity/Purification	Purified Mouse Monoclonal Antibody (Mab)
Form/Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Sequence Length	972
Applicable Applications for anti-CSF1R antibody	IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry), ELISA, WB (Western Blot)
Function	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.
Cellular Location	Cell membrane; Single-pass type I membrane Vprotein
Tissue Location	Expressed in bone marrow and in differentiated blood mononuclear cells

Preparation and Storage

Maintain refrigerated at 2-8°C for up to 2 weeks.. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

IMAGES



Application Data

Anti-CSF1R Antibodyat 1:4000 dilution + U-87MG whole cell lysates Lysates/proteins at 20 ug per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 108 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



Application Data

Anti-CSF1R Antibody at 1:2000 dilution + human placenta lysates Lysates/proteins at 20 ug per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 108 kDa Blocking/Dilution buffer: 5%NFDm/TBST.



Application Data

Overlay histogram showing U-87MG cells stained with AM8467b (green line). The cells were fixed with 2% paraformaldehyde (10 min). The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AAA283572, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-mouse IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(NA168821) at 1/400 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG (1?g/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



IHC (Immunohiostchemistry)

AAA283572 staining CSF1R in human skin sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at roomtemperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody



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ADDITIONAL INFORMATION

Related Product Information for anti-CSF1R antibody

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Product Categories/Family for anti-CSF1R antibody

Crown Antibodies; Stem Cells

References	<p>Hampe A.,et al.Oncogene Res. 4:9-17(1989).</p> <p>Coussens L.,et al.Nature 320:277-280(1986).</p> <p>Andre C.,et al.Genomics 39:216-226(1997).</p> <p>Jin P.,et al.Arthritis Res. Ther. 10:R73-R73(2008).</p> <p>Schmutz J.,et al.Nature 431:268-274(2004).</p>
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NCBI AND UNIPROT INFORMATION

NCBI GI #	569026720
NCBI GeneID	1436
NCBI Accession #	NP_001275634.1
NCBI GenBank Nucleotide #	NM_001288705.1
UniProt Accession #	P07333; Q6LDW5; Q6LDY4; Q86VW7; B5A955; D3DQG2
Molecular Weight	107984
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
NCBI Protein Information	macrophage colony-stimulating factor 1 receptor
UniProt Protein Name	Macrophage colony-stimulating factor 1 receptor
UniProt Gene Name	CSF1R
UniProt Synonym Gene Names	FMS; CSF-1-R; CSF-1R; M-CSF-R
UniProt Entry Name	CSF1R_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.