10320 Camino Santa Fe, Suite A
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-CSF1R / M-CSFR / CD115 Reference Antibody (emactuzumab)

Recombinant Antibody
Catalog # APR10851

Specification

Anti-CSF1R / M-CSFR / CD115 Reference Antibody (emactuzumab) - Product Information

Application	**FC, Kinetics, Animal Model**
Primary Accession	P07333
Reactivity	**Human, Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**145 KDa**

Anti-CSF1R / M-CSFR / CD115 Reference Antibody (emactuzumab) - Additional Information

Target/Specificity
CSF1R / M-CSFR / CD115

Endotoxin
< 0.001EU/ μg,determined by LAL method.

Conjugation
Unconjugated

Expression system
CHO Cell

Format
Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

Anti-CSF1R / M-CSFR / CD115 Reference Antibody (emactuzumab) - Protein Information

Name CSF1R

Synonyms FMS

Function
Tyrosine-protein kinase that acts as a 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 pro-inflammatory 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, including the ERK1/2 and the JNK pathway (PubMed:20504948, PubMed:30982609). 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. In the central nervous system, may play a role in the development of microglia macrophages (PubMed:30982608).

Cellular Location
Cell membrane; Single-pass type I membrane protein

Tissue Location
Expressed in bone marrow and in differentiated blood mononuclear cells

Anti-CSF1R / M-CSFR / CD115 Reference Antibody (emactuzumab) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-CSF1R / M-CSFR / CD115 Reference Antibody (emactuzumab) - Images

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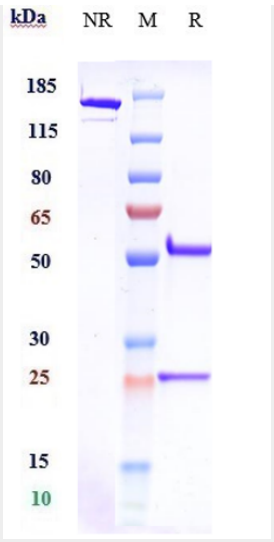
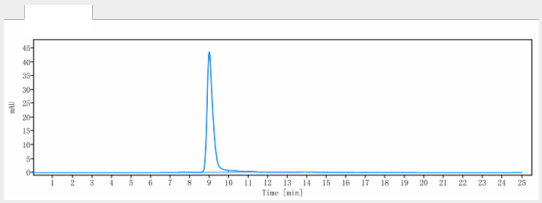


Anti-CSF1R / M-CSFR / CD115 Reference Antibody (emactuzumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-CSF1R / M-CSFR / CD115 Reference Antibody (emactuzumab)is more than 95% ,determined by SEC-HPLC.