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Datasheet for ABIN7320415
CSF1R Protein (His tag)

1 Image

Overview

Quantity:	100 µg
Target:	CSF1R
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This CSF1R protein is labelled with His tag.

Product Details

Purpose:	Recombinant Mouse CSF1R/CD115 Protein (His Tag)(Active)
Sequence:	Met 1-Ser 511
Characteristics:	A DNA sequence encoding the mouse CSF1R (NP_001032948.2) extracellular domain (Met 1-Ser 511) was fused with a polyhistidine tag at the C-terminus.
Purity:	> 97 % as determined by SDS-PAGE
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.
Biological Activity Comment:	1. Measured by its ability to bind recombinant mouse IL34 in a functional ELISA.2. Measured by its binding ability in a functional ELISA.3. Immobilized mouse CSF1R-His at 10 µg/mL (100 µl/well) can bind biotinylated human CSF1-his, The EC50 of biotinylated human CSF1-his is 0.50 µg/mL.

Target Details

Target: CSF1R

Alternative Name: CSF1R/CD115 ([CSF1R Products](#))

Background: M-CSFR encoded by the proto-oncogene c-fms is the receptor for colony stimulating factor 1 (CSF1R), a cytokine involved in the proliferation, differentiation, and activation of macrophages. This cell surface glycoprotein is consisted by an extracellular ligand-binding domain, a single membrane-spanning segment, and an intracellular tyrosine kinase domain. Binding of CSF1 activates the receptor kinase, leading to "autophosphorylation" of receptor subunits and the concomitant phosphorylation of a series of cellular proteins on tyrosine residues. CSF1R is a tyrosine kinase receptor that is absolutely required for macrophage differentiation and thus occupies a central role in hematopoiesis. CSF1 and its receptor (CSF1R, product of c-fms proto-oncogene) were initially implicated as essential for normal monocyte development as well as for trophoblastic implantation. This apparent role for CSF1/CSF1R in normal mammary gland development is very intriguing because this receptor/ligand pair has also been found to be important in the biology of breast cancer in which abnormal expression of CSF1 and its receptor correlates with tumor cell invasiveness and adverse clinical prognosis. Tumor cell expression of CSF1R is under the control of several steroid hormones (glucocorticoids and progestins) and the binding of several bHLH transcription factors, while tumor cell expression of CSF-1 appears to be regulated by other hormones, some of which are involved in normal lactogenic differentiation. However, studies have demonstrated that CSF1 and CSF1R have additional roles in mammary gland development during pregnancy and lactation. The role of CSF1 and CSF1R in normal and neoplastic mammary development that may elucidate potential relationships of growth factor-induced biological changes in the breast during pregnancy and tumor progression.

Synonym: AI323359;CD115;CSF-1R;Csfmr;Fim-2;Fms;M-CSF-R;M-CSFR

Molecular Weight: 56.8 kDa

NCBI Accession: [NP_001032948](#)

Pathways: [RTK Signaling](#), [Inositol Metabolic Process](#), [Cell-Cell Junction Organization](#)

Application Details

Restrictions: For Research Use only

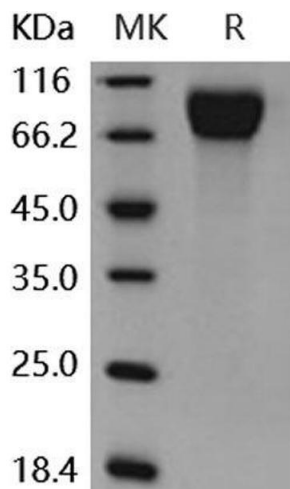
Handling

Format: Lyophilized

Handling

Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile PBS, pH 7.4
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Images



Western Blotting

Image 1.