

Datasheet for ABIN7317115

CSF1R Protein (GST tag, His tag)





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Overview

Quantity:	50 μg
Target:	CSF1R
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CSF1R protein is labelled with GST tag, His tag.

Product Details

Purpose:	Recombinant Human CSF1R/CD115 Protein (His & GST Tag)
Sequence:	Lys 543-Cys 972
Characteristics:	A DNA sequence encoding the human CSF1R (NP_005202.2) cytoplasmic domain (Lys 543-Cys 972) was fused with the N-terminal polyhistidine-tagged GST tag at the N-terminus.
Purity:	> 82 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

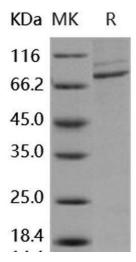
Target:	CSF1R
Alternative Name:	CSF1R/CD115 (CSF1R Products)
Background:	Background: M-CSFR encoded by the proto-oncogene c-fms is the receptor for colony stimulating factor 1 (CSF1R); a cytokine involved in the proliferation; differentiation; and
	activation of macrophages. This cell surface glycoprotein 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 factorinduced biological changes in the breast during pregnancy and tumor progression. Synonym: Macrophage colony-stimulating factor 1 receptor; CSF-1 receptor; CSF-1-R; CSF-1R; M-CSF-R; Proto-oncogene c-Fms; CD115; CSF1R; FMS;C-FMS;FIM2;FMS;HDLS;M-CSF-R;MCSF Receptor

Molecular Weight:	76 kDa
NCBI Accession:	NP_005202
Pathways:	RTK Signaling, Inositol Metabolic Process, Cell-Cell Junction Organization

Application Details

Restrictions:	For Research Use only
Handling	
Format:	Frozen, Liquid
Buffer:	Supplied as sterile 50 mM Tris, 150 mM NaCl, pH 7.4, 20 % glycerol, 0.3 mM DTT
Storage:	-20 °C
Storage Comment:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.



Western Blotting

Image 1.