Mouse CSF1R,M-CSFR ELISA Kit

Catalog No: #EK5355

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Description

Product Name	Mouse CSF1R,M-CSFR ELISA Kit
Specificity	Mouse
Crossing Reactivity	There is no detectable cross-reactivity with other relevant proteins.
Immunogen Type	NSO,A20-S511
Other Names	Macrophage colony-stimulating factor 1 receptor; CSF-1 receptor; CSF-1-R; CSF-1R; M-CSF-R; 2.7.10.1; Proto-oncogene c-Fms; CD115; Csf1r; Csfmr, Fms;
Accession No.	P09581
Uniprot	P09581
GeneID	12978;
Cell Localization	Cell membrane; The autophosphorylated receptor is ubiquitinated andinternalized, leading to its degradation.

Application Details

sensitivity:10pg mlDetect Range:62.5pg ml-4000pg mlsample_type:cell culture supernates cell lysates tissue homogenates serum or plasma (heparin EDTA) capture_antibody:monoclonal antibody from ratdetection_antibody:polyclonal antibody from goatgene_name:CSF1Rprotein_name:Macrophage colony-stimulating factor 1 receptorgene_full_name:Macrophage colony-stimulating factor 1 receptortissue_specificity: Widely expressed..sequence_similarities:Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1 PDGF receptor subfamily.tmb_incubation:20-25minresearch_category:cardiovascular|angiogenesis|cytokines|immunology|innate immunity|macrophage / inflamm.|csfs|signal transduction|protein phosphorylation|ser / thr kinases kinases

Product Description

Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse CSF1R,M-CSFR

Background

protein_function: Tyrosine-protein kinase that acts as cell-surfacereceptor for CSF1 and IL34 and plays an essential role in theregulation of survival, proliferation and differentiation ofhematopoietic precursor cells, especially mononuclear phagocytes,such as macrophages and monocytes. Promotes the release ofproinflammatory chemokines in response to IL34 and CSF1, andthereby plays an important role in innate immunity and ininflammatory processes. Plays an important role in the regulationof osteoclast proliferation and differentiation, the regulation ofbone resorption, and is required for normal bone and toothdevelopment. Required for normal male and female fertility, andfor normal development of milk ducts and acinar structures in themammary gland during pregnancy. Promotes reorganization of theactin cytoskeleton, regulates formation of membrane ruffles, celladhesion and cell migration, and promotes cancer cell invasion.Activates several signaling pathways in response to ligandbinding. Phosphorylates PIK3R1, PLCG2, GRB2, SLA2 and CBL.Activation of PLCG2 leads to the production of the cellularsignaling molecules diacylglycerol and inositol 1,4,5-trisphosphate, that then lead to the activation of protein kinaseC family members, especially PRKCD. Phosphorylation of PIK3R1, theregulatory subunit of phosphatidylinositol 3-kinase, leads toactivation of the AKT1 signaling pathway. Activated CSF1R alsomediates activation of the MAP kinases MAPK1,ERK2 and,orMAPK3,ERK1, and of the SRC family kinases SRC, FYN and YES1.Activated CSF1R transmits signals both via proteins that directlyinteract with phosphorylated tyrosine residues in itsintracellular domain, or via adapter proteins, such as GRB2.Promotes activation of STAT family members STAT3, STAT5A and,orSTAT5B. 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 itsdownstream effectors, and by rapid internalization of theactivated receptor..CSF1R(Colony stimulating factor 1 receptor),also known as M-CSFR and CD115, is a cell-surface protein encoded, in humans, by the CSF1R gene. The gene is located on long arm of chromosome 5(5q32) on the Crick(minus) strand. The encoded protein

is a tyrosine kinase transmembrane receptor and member of the CSF1,PDGF receptor family of tyrosine-protein kinases. The encoded protein is a single pass type I membrane protein and acts as the receptor for colony stimulating factor 1, a cytokine which controls the production, differentiation, and function of macrophages. Both CSF1R, and its ligand colony stimulating factor 1 play an important role in the development of the mammary gland and may be involved in the process of mammary gland carcinogenesis.

Note: This product is for in vitro research use only