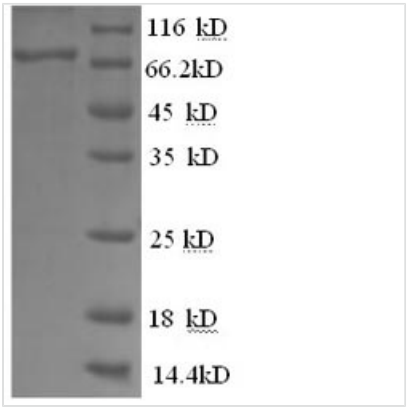
Recombinant Cat Macrophage colony-stimulating factor 1 receptor (CSF1R), partial

Product Code	CSB-EP006044CA
Relevance	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 hatopoietic precursor cells, especially mononuclear phagocytes, such as macrophages and monocytes. Promotes the release of proinflammatory chokines 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 fale 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 mbrane 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 mbers, 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 mbers 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 .
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P13369
Alias	CSF-1 receptor (EC:2.7.10.1) ;CSF-1-R ;CSF-1R ;M-CSF-RProto-oncogene c-Fms; CD115
Product Type	Recombinant Protein
Immunogen Species	Felis catus (Cat) (Felis silvestris catus)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	VPVIQPSGPELVVEPGTTVTLRCVGNGSVEWDGPISPHWNLDLDPPSSILTTN NATFQNTGTYHCTEPGNPQGGNATIHLYVKDPARPWKVLAQEVTVLEGQDAL LPCLLTDPALEAGVSLVRVRGRPVLRQTNYSFSPWHGFTIHKAKFIENHVYQC

	SARVDGRTVTSMGIWLKVQKDISGPATLTLEPAELVRIQGEAAQIVCSASNIDV NFDVSLRHGDTKLTISQQSDFHDNRYQKVLTLNLDHVSFQDAGNYSCTATNA WGNHSASMVFRVVESAYLNLTSEQSLLQEVTVGEKVDLQVKVEAYPGLESFN WTYLGPFSDYQDKLDFVTIKDTYRYTSTLSLPRLKRSEAGRYSFLARNAGGQN ALTFELTLRYPPEVRVTMTLINGSDTLLCEASGYPQPSVTWVQCRSHTDRCDE SAGLVLEDSHSEVLSQVPFHEVIVHSLLAIGTLEHNRTYECRAFNSVGNSSQTF WPISIGAHTQLPDELLFTP
Lead Time	3-7 business days
Research Area	Others
Source	E.coli
Gene Names	CSF1R
Expression Region	20-514
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	70.8kDa
Protein Description	Extracellular Domain
Image	 (Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.