Macrophage colony-stimulating factor 1 receptor Polyclonal Antibody

Catalog No: #42493

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

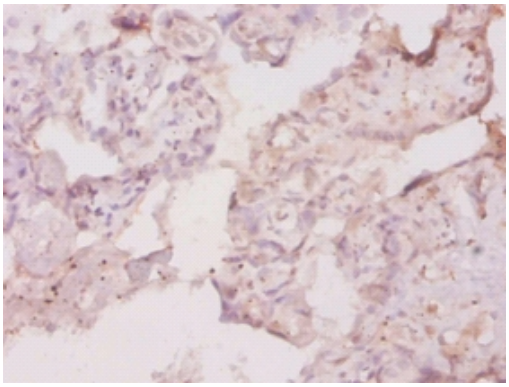
Description

Product Name	Macrophage colony-stimulating factor 1 receptor Polyclonal Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Caprylic Acid Ammonium Sulfate Precipitation purified
Applications	IHC
Species Reactivity	Ms
Specificity	The antibody detects endogenous level of total Macrophage colony-stimulating factor 1 receptor polyclonal antibody.
Immunogen Type	protein
Immunogen Description	Recombinant mouse Macrophage colony-stimulating factor 1 receptor protein
Target Name	Macrophage colony-stimulating factor 1 receptor
Other Names	CSF-1 receptor, Proto-oncogene c-Fms, CD115, Csf1r, Csfmr, Fms
Accession No.	Swiss-Prot#: P07141
Uniprot	P07141
GeneID	12977;
Formulation	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
Storage	Store at -20°C

Application Details

Immunohistochemistry: 1:20 - 1:200

Images



Immunohistochemical analysis of paraffin-embedded human placenta using #42493 at dilution of 1:20.

Background

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 hematopoietic precursor cells, especially mononuclear phagocytes, such as macrophages and monocytes. Promotes the release of

proinflammatory 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. 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.

References

[1]"Murine c-fms cDNA: cloning, sequence analysis and retroviral expression."Rothwell V.M., Rohrschneider L.R.Oncogene Res. 1:311-324(1987) [2] "The transcriptional landscape of the mammalian genome."Carninci P., Kasukawa T., Ka

Note: This product is for in vitro research use only