

c-Fms/CSF-1R (G-17): sc-31638

BACKGROUND

c-Fms/CSF-1R, also designated macrophage colony-stimulating factor receptor (M-CSFR), FIM2 or CD115, is a transmembrane tyrosine kinase receptor belonging to the CSF1/PDGF receptor family. It is encoded by the c-Fms proto-oncogene and is expressed in mononuclear phagocytes, oocytes, decidual cells, trophoblastic cells and some myoblasts. It is important for growth and differentiation of myeloid cells and its function can be regulated by SLAP-2. c-Fms/CSF-1R is responsible for mediating all of the functions of M-CSF. M-CSF is a glycoprotein required for the proliferation and differentiation of mononuclear phagocytes, including osteoclasts. M-CSF has also been identified as an important mediator of the inflammatory response and can regulate the release of proinflammatory cytokines from macrophages.

REFERENCES

1. Timms, J.F., et al. 1998. Identification of major binding proteins and substrates for the SH2-containing protein tyrosine phosphatase SHP-1 in macrophages. *Mol. Cell. Biol.* 18: 3838-3850.
2. Cross, M., et al. 2004. A novel 110 kDa form of Myosin XVIII (MysPDZ) is tyrosine-phosphorylated after colony-stimulating factor-1 receptor signalling. *Biochem. J.* 380: 243-253.
3. Tagoh, H., et al. 2004. Epigenetic silencing of the c-Fms locus during B-lymphopoiesis occurs in discrete steps and is reversible. *EMBO J.* 23: 4275-4285.
4. Pixley, F.J., et al. 2005. Bcl-6 suppresses Rho A activity to alter macrophage morphology and motility. *J. Cell Sci.* 118: 1873-1883.
5. Cross, M., et al. 2005. A proteomics strategy for the enrichment of receptor-associated complexes. *Proteomics* 5: 4754-4763.

CHROMOSOMAL LOCATION

Genetic locus: CSF1R (human) mapping to 5q32; Csf1r (mouse) mapping to 18 E1.

SOURCE

c-Fms/CSF-1R (G-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of c-Fms/CSF-1R of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-31638 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

c-Fms/CSF-1R (G-17) is recommended for detection of c-Fms/CSF-1R of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

c-Fms/CSF-1R (G-17) is also recommended for detection of c-Fms/CSF-1R in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for c-Fms/CSF-1R siRNA (h): sc-29220, c-Fms/CSF-1R siRNA (m): sc-29847, c-Fms/CSF-1R shRNA Plasmid (h): sc-29220-SH, c-Fms/CSF-1R shRNA Plasmid (m): sc-29847-SH, c-Fms/CSF-1R shRNA (h) Lentiviral Particles: sc-29220-V and c-Fms/CSF-1R shRNA (m) Lentiviral Particles: sc-29847-V.

Molecular Weight of unprocessed c-Fms/CSF-1R: 130 kDa.

Molecular Weight of processed c-Fms/CSF-1R: 165 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211, THP-1 cell lysate: sc-2238 or HL-60 whole cell lysate: sc-2209.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **c-Fms/CSF-1R (B-8): sc-46662** or **c-Fms/CSF-1R (D-8): sc-365719**, our highly recommended monoclonal alternatives to c-Fms/CSF-1R (G-17). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **c-Fms/CSF-1R (B-8): sc-46662**.