BACKGROUND

c-Fms/CSF-1R, also designated macrophage colony-stimulating factor receptor (M-CSFR), FM2 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.

CHROMOSOMAL LOCATION

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

SOURCE

c-Fms/CSF-1R (D-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 943-971 at the C-terminus of c-Fms/CSF-1R of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-365719 P, (100 µg peptide in 0.5 ml PBS containing <0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

c-Fms/CSF-1R (D-8) is recommended for detection of c-Fms/CSF-1R of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)), 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 (D-8) is also recommended for detection of c-Fms/CSF-1R in additional species, including bovine.

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: c-Fms/CSF-1R (m): 293T Lysate: sc-118887, THP-1 cell lysate: sc-2209.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

DATA

SELECT PRODUCT CITATIONS


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.

PROTOCOLS

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

CONJUGATES

See c-Fms/CSF-1R (B-8): sc-46662 for c-Fms/CSF-1R antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.