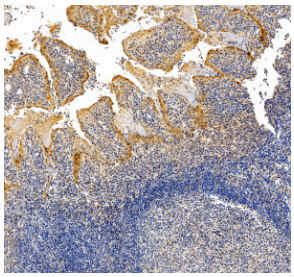
CSF1R Antibody / M-CSF Receptor Antibody (R31005)

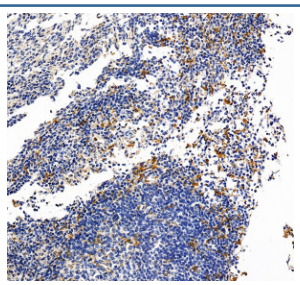
Catalog No.	Formulation	Size
R31005	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

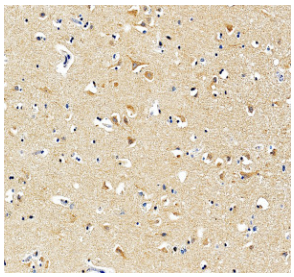
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P07333
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml
Limitations	This CSF1R Antibody / M-CSF Receptor Antibody is available for research use only.



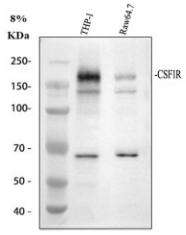
CSF1R Antibody IHC in Human Tonsil. Immunohistochemistry of FFPE human tonsil tissue was performed with CSF1R Antibody at 2 ug/ml following heat-induced epitope retrieval in pH 8 EDTA buffer. Heterogeneous brown staining is observed among cells within the lymphoid tissue, with stronger labeling in selected cell populations and comparatively little signal in many surrounding lymphocytes.



CSF1R Antibody IHC in Human Breast Cancer. Immunohistochemistry of FFPE human breast cancer tissue was performed with CSF1R Antibody at 2 ug/ml following heat-induced epitope retrieval in pH 8 EDTA buffer. Scattered cells show distinct brown cytoplasmic and membranous staining among largely negative tumor and stromal cell populations. The restricted staining pattern supports detection with an M-CSF Receptor Antibody in human breast cancer tissue.



CSF1R Antibody IHC in Human Brain. Immunohistochemistry of FFPE human brain tissue was performed with CSF1R Antibody at 2 ug/ml following heat-induced epitope retrieval in pH 8 EDTA buffer. Brown staining is present in a population of scattered cells within the brain tissue, with predominantly cytoplasmic and membranous labeling. The staining supports tissue detection using an M-CSF Receptor Antibody.



CSF1R Antibody Western Blot in THP-1 and RAW264.7 Cells. Western blot testing of human THP-1 (lane 1) and mouse RAW264.7 (lane 2) cell lysates was performed with CSF1R Antibody at 0.5 ug/ml. A predominant band is detected at approximately 170 kDa in both samples, above the calculated molecular weight of ~108 kDa. The higher apparent molecular weight is consistent with extensive glycosylation of the mature M-CSF receptor. The results demonstrate detection with an M-CSF Receptor Antibody in human and mouse cell lysates.

Description

CSF1R Antibody recognizes colony-stimulating factor 1 receptor, a transmembrane receptor tyrosine kinase encoded by the CSF1R gene. Also known as M-CSF receptor, CD115, and c-FMS, CSF1R is a member of the class III receptor tyrosine kinase family. The receptor plays a central role in the development, survival, proliferation, and functional regulation of cells belonging to the monocyte and macrophage lineages.

CSF1R is activated primarily by colony-stimulating factor 1 (CSF1 or M-CSF) and interleukin-34 (IL-34). Ligand binding promotes receptor dimerization and activation of the intracellular tyrosine kinase domain, resulting in receptor autophosphorylation and recruitment of downstream signaling proteins. These events regulate pathways involved in cell survival, proliferation, differentiation, migration, and cytoskeletal organization.

M-CSF receptor signaling is particularly important in monocytes, macrophages, and related myeloid populations. CSF1R contributes to macrophage differentiation and tissue maintenance and is also expressed by microglia, the resident macrophage population of the central nervous system. Through these cellular populations, CSF1R signaling participates in innate immunity, tissue homeostasis, inflammatory responses, and remodeling of the local tissue environment.

Altered CSF1R signaling has been investigated in cancer, inflammatory disease, and neurological disorders. Macrophages within tumor microenvironments can express CD115 and respond to CSF1R ligands, making the receptor relevant to research into tumor-associated macrophages and immune regulation. Genetic alterations affecting CSF1R can also disrupt microglial function and are associated with neurological disease, highlighting the receptor's importance beyond peripheral myeloid biology.

A CSF1R Antibody can support research into macrophage differentiation, myeloid cell biology, microglia, innate immunity, and receptor tyrosine kinase signaling. NSJ Bioreagents provides antibodies for research investigating M-CSF receptor function and the cellular pathways regulated by CSF1R.

Explore our Macrophage Antibodies for additional research into macrophage differentiation, signaling, and function.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the CSF1R Antibody / M-CSF Receptor Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the C-terminus of human Colony stimulating factor 1 receptor (EQGDIAQPLLQPNNYQFC) was used as the immunogen for this CSF1R Antibody.

Storage

After reconstitution, the CCSF1R Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

M-CSF Receptor antibody, CSF1R antibody, CD115 antibody, c-FMS antibody, FMS antibody, Colony Stimulating Factor 1 Receptor antibody, Macrophage Colony Stimulating Factor 1 Receptor antibody

Copyright © NSJ Bioreagents. All rights reserved.