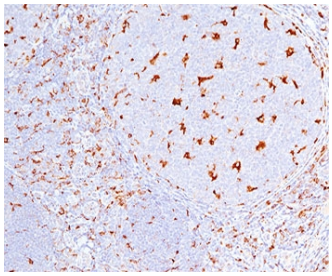
CD68 Antibody C68/684 / Mouse Monoclonal [clone C68/684] (V2074)

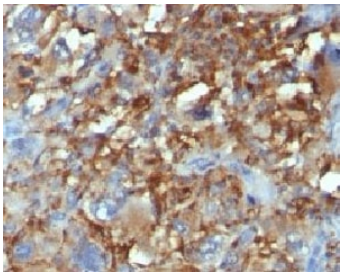
Catalog No.	Formulation	Size
V2074-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2074-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2074SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2074IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

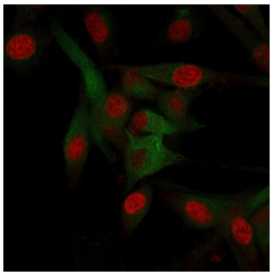
Species Reactivity	Human, Mouse, Rat, Cat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	C68/684
Purity	Protein G affinity chromatography
Gene ID	968
Localization	Cytoplasmic, membrane
Applications	Western Blot : 1-2ug/ml Immunofluorescence : 1-2ug/ml Flow Cytometry : 1-2ug/million cells Immunohistochemistry (FFPE) : 0.5-1ug/ml for 30 min at RT
Limitations	This CD68 Antibody C68/684 is available for research use only.



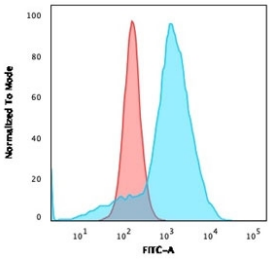
CD68 Antibody C68/684 Human Tonsil IHC. Immunohistochemical staining of human tonsil tissue (10Ã—) using CD68 Antibody C68/684. CD68-positive macrophages are visualized with strong brown cytoplasmic staining, predominantly within the germinal centers and interfollicular regions, consistent with the expected distribution of resident macrophages in lymphoid tissue. This CD68 Antibody, clone C68/684, provides clear identification of macrophage populations and is well suited for immunohistochemical studies of innate immunity, inflammatory responses and tissue macrophage biology.



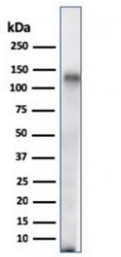
CD68 Antibody C68/684 Human Histiocytoma IHC. Immunohistochemical staining of formalin-fixed, paraffin-embedded human histiocytoma using CD68 Antibody C68/684 / Mouse Monoclonal. Strong brown cytoplasmic staining is observed in neoplastic histiocytic cells, demonstrating robust CD68 expression characteristic of cells of the monocyte/macrophage lineage. This CD68 Antibody, clone C68/684, provides reliable detection of CD68-positive histiocytic cells and is well suited for immunohistochemical studies of macrophage biology, histiocytic lesions and innate immune cell identification.



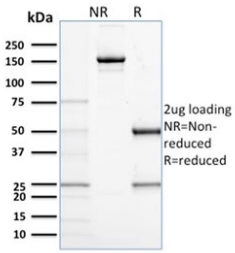
CD68 Antibody C68/684 Human U-87 MG Cell IF. Immunofluorescent staining of fixed human U-87 MG cells using CD68 Antibody C68/684 / Mouse Monoclonal. CD68 was detected with a green fluorescent secondary antibody, while nuclei were counterstained with RedDot (red). Cytoplasmic fluorescence is consistent with the predominantly lysosomal localization of CD68, with minimal nuclear signal. This CD68 Antibody, clone C68/684, is suitable for immunofluorescence studies of macrophage-associated lysosomal proteins and CD68 expression in cultured cells.



CD68 Antibody C68/684 Human U-87 MG Cell FACS. Flow cytometric analysis of fixed human U-87 MG cells using CD68 Antibody C68/684 / Mouse Monoclonal. The blue histogram represents cells stained with the CD68 antibody, while the red histogram shows the isotype control. A clear rightward shift of the CD68-stained population demonstrates specific intracellular detection of CD68 compared with the control. This CD68 Antibody, clone C68/684, is well suited for flow cytometric analysis of CD68 expression and macrophage-associated lysosomal proteins.



CD68 Antibody C68/684 Human Spleen WB. Western blot analysis of human spleen lysate using CD68 Antibody C68/684 / Mouse Monoclonal. A prominent immunoreactive band is detected at approximately 110 kDa, consistent with the highly glycosylated form of CD68. Although the core protein has a predicted molecular weight of approximately 37 kDa, extensive glycosylation typically results in an apparent molecular weight ranging from approximately 75 to 110 kDa in Western blot analysis. This CD68 Antibody, clone C68/684, is suitable for detecting native CD68 and its mature glycosylated forms in human tissues.



SDS-PAGE analysis of purified, BSA-free CD68 antibody (clone C68/684) as confirmation of integrity and purity.

Description

CD68 Antibody C68/684 / Mouse Monoclonal recognizes CD68 using the well-characterized mouse monoclonal clone C68/684. CD68 is a heavily glycosylated lysosomal membrane protein that is abundantly expressed by macrophages, monocytes and other cells of the mononuclear phagocyte system. As one of the most widely used macrophage markers, CD68 enables researchers to identify tissue-resident macrophages, evaluate immune cell infiltration and investigate innate immune responses in both normal physiology and disease. NSJ Bioreagents provides CD68 Antibody, clone C68/684, for reliable detection of macrophage populations across a variety of research applications.

CD68 is localized primarily within lysosomes and endosomal compartments, where it contributes to phagocytic and endocytic processes characteristic of professional phagocytes. Tissue macrophages expressing CD68 are found throughout the body, including liver, spleen, lung, lymph node and central nervous system. Consequently, CD68 Antibody, clone C68/684 is well suited for studies examining macrophage localization, tissue remodeling, inflammatory responses and immune cell distribution in diverse biological systems.

CD68-positive macrophages play important roles in chronic inflammation, infection, autoimmune disease, fibrosis, neurodegeneration and cancer. Quantification of these cells is frequently used to assess tumor-associated macrophages, monitor inflammatory severity and characterize changes within the tissue microenvironment. The C68/684 clone has been cited in numerous peer-reviewed publications, providing researchers with a well-documented mouse monoclonal reagent for reproducible CD68 detection and continuity with published studies.

A CD68 Antibody is a valuable reagent for detecting macrophages by Western blotting, immunohistochemistry, immunofluorescence, flow cytometry and related immunoassays. A Mouse Monoclonal CD68 antibody supports investigations of innate immunity, monocyte and macrophage biology, inflammatory disease and tissue-resident phagocyte populations.

For an overview of CD68 biology and to view Protein Microarray Validated specificity data generated with our LAMP4/1830 clone, visit our CD68 Antibody / Macrophage Marker Antibody page.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the CD68 Antibody C68/684 to be titered up or down for optimal performance.

1. Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10mM Citrate Buffer, pH 6 or pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 minutes.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

The subcellular fraction of human alveolar macrophages was used as the immunogen for this CD68 antibody.

Storage

Store the CD68 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD68 antibody, C68/684 antibody, Macrophage Marker antibody, Macrosialin antibody

References (2)

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