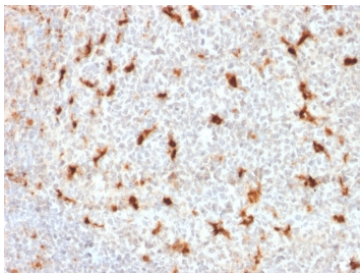
CD68 Antibody LAMP4/1830 / Macrophage Marker Antibody [clone LAMP4/1830] (V3800)

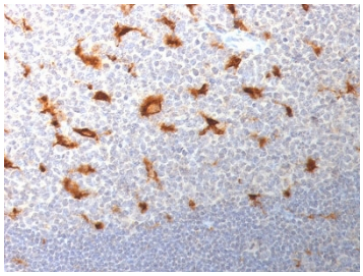
Catalog No.	Formulation	Size
V3800-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3800-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3800SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

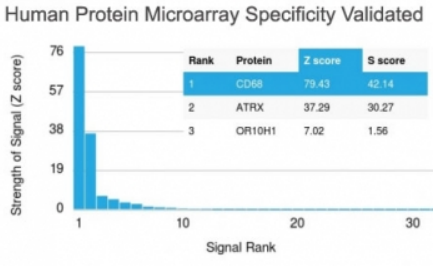
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	LAMP4/1830
Purity	Protein G affinity chromatography
UniProt	P34810
Localization	Cytoplasmic, membrane
Applications	Flow cytometry: 1-2ug/million cells ELISA: order BSA/sodium azide-free format for coating Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This CD68 Antibody LAMP4/1830 / Macrophage Marker Antibody is available for research use only.



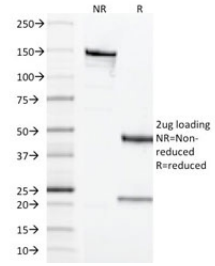
CD68 Antibody LAMP4/1830 Human Tonsil IHC. Immunohistochemical staining of FFPE human tonsil tissue using CD68 Antibody / Macrophage Marker Antibody (clone LAMP4/1830). Heat-induced epitope retrieval was performed in pH6, 10 mM citrate buffer followed by HRP-based detection with DAB. Distinct cytoplasmic staining is observed in scattered macrophages within the tonsillar tissue, consistent with the expected distribution of CD68-positive cells in secondary lymphoid organs. This CD68 Antibody, a macrophage marker, is well suited for immunohistochemical identification of macrophages in studies of innate immunity, inflammation and tissue-resident phagocyte populations.



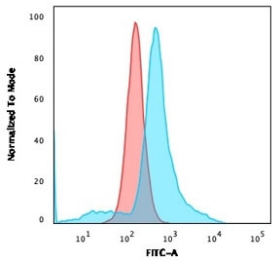
CD68 Antibody LAMP4/1830 Human Tonsil Macrophage IHC. Immunohistochemical staining of FFPE human tonsil tissue using CD68 Antibody / Macrophage Marker Antibody (clone LAMP4/1830). Heat-induced epitope retrieval was performed in pH6, 10 mM citrate buffer followed by HRP-based detection with DAB. Strong cytoplasmic staining highlights numerous CD68-positive macrophages distributed throughout the tonsillar tissue, consistent with the expected localization of resident phagocytic cells in secondary lymphoid organs. This CD68 Antibody, a macrophage marker, is well suited for immunohistochemical studies of macrophage distribution, innate immune responses and inflammatory tissue microenvironments.



CD68 Antibody LAMP4/1830 Human Protein Microarray Validation. Protein microarray specificity analysis of CD68 Antibody / Macrophage Marker Antibody (clone LAMP4/1830) was performed using the HuProt(TM) platform containing more than 19,000 full-length human proteins. CD68 ranked as the top-reactive target with a Z-score of 79.43 and an S-score of 42.14, demonstrating excellent target specificity with strong separation from lower-ranked proteins. The Z-score reflects binding signal intensity relative to the array background, while the S-score measures the specificity gap between the intended target and the next highest-ranked protein. This CD68 Antibody, a macrophage marker, is Protein Microarray Validated for highly specific detection of CD68 in immunological and cell biology research.



SDS-PAGE analysis of purified, BSA-free CD68 antibody (clone LAMP4/1830) as confirmation of integrity and purity.



CD68 Antibody LAMP4/1830 Human U-87 MG Cell FACS. Flow cytometric analysis of fixed human U-87 MG cells stained with CD68 Antibody / Macrophage Marker Antibody (clone LAMP4/1830). Red: isotype control; blue: CD68 antibody. A clear rightward shift of the CD68 antibody signal relative to the isotype control demonstrates specific detection of intracellular CD68 expression in U-87 MG cells. This CD68 Antibody, a macrophage marker, is well suited for flow cytometry studies of monocyte/macrophage lineage proteins, innate immunity and immune cell characterization.

Description

CD68 Antibody LAMP4/1830 / Macrophage Marker Antibody recognizes CD68, a highly glycosylated lysosomal membrane protein that is widely used as a marker of macrophages, monocytes and other cells of the mononuclear phagocyte system. CD68 belongs to the lysosome-associated membrane glycoprotein family and is primarily localized within intracellular endosomes and lysosomes, although limited surface expression has also been reported in activated

cells. Owing to its abundant expression in tissue macrophages, CD68 has become one of the most frequently used markers for identifying macrophage populations in normal tissues and disease. NSJ Bioreagents provides CD68 antibodies for studies of innate immunity, inflammation, tissue remodeling and macrophage biology.

CD68 is expressed by resident macrophages in numerous organs, including liver, spleen, lung, lymph node, bone marrow and central nervous system, where it is prominently detected in Kupffer cells, alveolar macrophages and microglia. The protein participates in lysosomal function, phagocytosis, endocytic trafficking and clearance of cellular debris. Because macrophages exhibit remarkable functional diversity across tissues, CD68 remains an essential marker for investigating macrophage localization, abundance and activation during development, homeostasis and immune responses.

Altered CD68 expression is associated with a broad range of pathological conditions including chronic inflammation, infectious disease, autoimmune disorders, atherosclerosis, neurodegeneration and cancer. Quantification of CD68-positive macrophages is commonly used to evaluate immune cell infiltration within tumors and inflamed tissues, providing valuable insight into disease progression and the tissue microenvironment. Consequently, CD68 is extensively employed in immunology, oncology, pathology and neuroscience research to characterize macrophage distribution and innate immune activity.

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

Researchers studying leukocyte phenotyping and immune cell identification may also be interested in our CD Antibodies page, featuring antibodies against clusters of differentiation (CD) markers used in immunology, hematology, oncology and flow cytometry research.

Application Notes

Optimal dilution of the CD68 Antibody LAMP4/1830 / Macrophage Marker Antibody should be determined by the researcher.

Immunogen

A portion of amino acids 150-301 from the human protein was used as the immunogen for the CD68 Antibody LAMP4/1830.

Storage

Store the CD68 Antibody LAMP4/1830 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD68 antibody, Macrophage Marker antibody, Macrosialin antibody, Lysosomal Glycoprotein antibody

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