

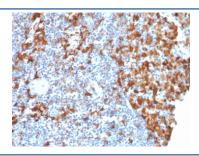
Recombinant IBA1 Antibody / AIF1 [clone rAIF1/1909] (V3831)

Catalog No.	Formulation	Size
V3831-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3831-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3831SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

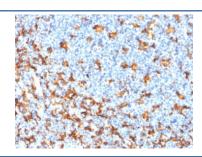
Recombinant MOUSE MONOCLONAL

Bulk quote request

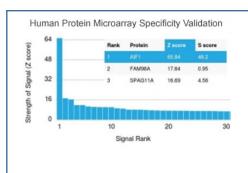
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rAIF1/1909
Purity	Protein G affinity chromatography
UniProt	P55008
Localization	Cytoplasmic, membranous
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This recombinant IBA1 antibody is available for research use only.



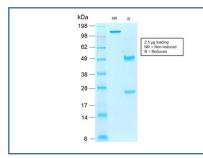
IHC testing of FFPE human lymph node with recombinant IBA1 antibody (clone rAIF1/1909). HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



IHC testing of FFPE human tonsil with recombinant IBA1 antibody (clone rAIF1/1909). HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using recombinant IBA1 antibody (clone rAIF1/1909). These results demonstrate the foremost specificity of the rAIF1/1909 mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free recombinant IBA1 antibody (clone rAIF1/1909) as confirmation of integrity and purity.

Description

Recombinant IBA1 antibody is a highly specific reagent for detecting ionized calcium-binding adaptor molecule 1, also known as AIF1. Encoded by the AIF1 gene, IBA1 is expressed primarily in microglia, macrophages, and other myeloid-lineage cells. It is a cytoplasmic protein that regulates actin dynamics, membrane ruffling, and phagocytosis. Because of its cell-type specificity and functional importance, IBA1 is widely used as a marker for microglia and macrophages in neuroscience and immunology.

IBA1 contributes to immune cell activation by binding actin and promoting cytoskeletal reorganization. It is essential for processes such as migration, motility, and phagocytosis, which enable microglia and macrophages to respond to injury and infection. In the nervous system, IBA1 expression is upregulated during neuroinflammation, making it a valuable marker for brain pathology. In immunology, IBA1 detection supports studies of macrophage biology and innate immunity.

The Recombinant IBA1 antibody clone rAIF1/1909 provides reliable and consistent recognition of this actin-binding protein. Recombinant technology guarantees batch-to-batch uniformity, reducing experimental variability. Clone rAIF1/1909 has been employed in studies of neuroinflammation, microglial activation, and macrophage function. Peer-reviewed publications have reported use of this clone in models of neurodegeneration and inflammatory disease, validating its importance in neuroscience research.

Research with clone rAIF1/1909 has clarified how IBA1 expression correlates with microglial activation states in conditions such as Alzheimer disease, Parkinson disease, and multiple sclerosis. In immunology, it has been used to investigate macrophage responses during infection and tissue repair. This antibody remains indispensable for exploring how innate immune cells contribute to both homeostasis and disease.

NSJ Bioreagents provides this Recombinant IBA1 antibody to support high-quality research in neurobiology and

immunology. The protein is also described as AIF1 antibody, ionized calcium-binding adaptor 1 antibody, macrophage activation factor antibody, and microglia marker antibody, reflecting the multiple terms used in scientific contexts.

Application Notes

Titering of the recombinant IBA1 antibody may be required for optimal performance.

Immunogen

A portion of amino acids 1-146 from the human protein was used as the immunogen for the recombinant IBA1 antibody.

Storage

Store the recombinant IBA1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).