

# AIF1 / Iba1 Rabbit pAb

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Catalog # AP94829

## Product Information

<b>Application</b>	WB, IHC-P, IHC-F, IF
<b>Primary Accession</b>	<a href="#">P55008</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	16703
<b>Physical State</b>	Liquid
<b>Immunogen</b>	KLH conjugated synthetic peptide derived from human Iba1
<b>Epitope Specificity</b>	51-147/147
<b>Isotype</b>	IgG
<b>Purity</b>	affinity purified by Protein A
<b>Buffer</b>	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
<b>SUBCELLULAR LOCATION</b>	Cytoplasm, cytoskeleton. Cell projection, ruffle membrane; Peripheral membrane protein; Cytoplasmic side. Note=Associated with the actin cytoskeleton at membrane ruffles and at sites of phagocytosis.
<b>SIMILARITY</b>	Contains 2 EF-hand domains.
<b>SUBUNIT</b>	Homodimer (Potential). Monomer. Interacts with LCP1.
<b>Important Note</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>Background Descriptions</b>	Allograft Inflammatory Factor-1 (AIF1) or ionized calcium-binding adaptor molecule 1 (Iba1) is expressed selectively in microglia/macrophages and is a Ca <sup>2+</sup> -binding peptide produced by activated monocytes and microglial cells. It has been suggested that AIF1 expression is associated with chronic inflammatory processes. AIF1 is expressed by activated monocytes and might participate in a variety of pathogenic processes in the mammalian brain and in chronic transplant rejection. It has been shown to be expressed early and persistently in chronically rejecting cardiac allografts but not in cardiac syngrafts and host hearts.

## Additional Information

<b>Gene ID</b>	199
<b>Other Names</b>	Allograft inflammatory factor 1, AIF-1, Ionized calcium-binding adapter molecule 1, Protein G1, AIF1, G1, IBA1
<b>Target/Specificity</b>	Detected in T-lymphocytes and peripheral blood mononuclear cells.
<b>Dilution</b>	WB=1:500-1000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
<b>Storage</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

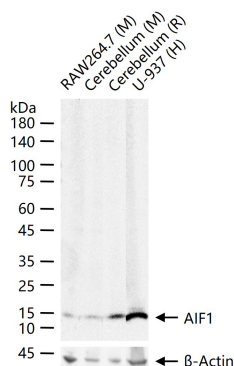
## Protein Information

<b>Name</b>	AIF1
<b>Synonyms</b>	G1, IBA1
<b>Function</b>	Actin-binding protein that enhances membrane ruffling and RAC activation. Enhances the actin-bundling activity of LCP1. Binds calcium. Plays a role in RAC signaling and in phagocytosis. May play a role in macrophage activation and function. Promotes the proliferation of vascular smooth muscle cells and of T-lymphocytes. Enhances lymphocyte migration. Plays a role in vascular inflammation.
<b>Cellular Location</b>	Cytoplasm, cytoskeleton {ECO:0000250 UniProtKB:O70200}. Cell projection, ruffle membrane {ECO:0000250 UniProtKB:O70200}; Peripheral membrane protein {ECO:0000250 UniProtKB:O70200}; Cytoplasmic side {ECO:0000250 UniProtKB:O70200}. Cell projection, phagocytic cup {ECO:0000250 UniProtKB:O70200}. Note=Associated with the actin cytoskeleton at membrane ruffles and at sites of phagocytosis {ECO:0000250 UniProtKB:O70200}
<b>Tissue Location</b>	Detected in T-lymphocytes and peripheral blood mononuclear cells.

## Background

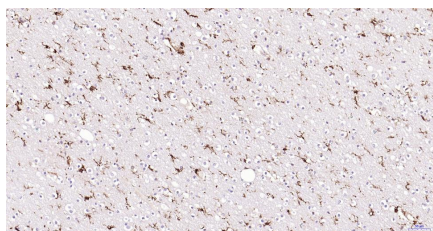
Allograft Inflammatory Factor-1 (AIF1) or ionized calcium-binding adaptor molecule 1 (Iba1) is expressed selectively in microglia/macrophages and is a Ca<sup>2+</sup>-binding peptide produced by activated monocytes and microglial cells. It has been suggested that AIF1 expression is associated with chronic inflammatory processes. AIF1 is expressed by activated monocytes and might participate in a variety of pathogenic processes in the mammalian brain and in chronic transplant rejection. It has been shown to be expressed early and persistently in chronically rejecting cardiac allografts but not in cardiac syngrafts and host hearts.

## Images



25 ug total protein per lane of various lysates (see on figure) probed with AIF1 (9A3) polyclonal antibody, unconjugated (AP94829) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r.t. for 60 min.

Paraformaldehyde-fixed, paraffin embedded Human Cerebrum; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with AIF1 (9A3) Polyclonal Antibody, Unconjugated (AP94829) at 1:200 overnight at 4°C, followed by conjugation to the SP



Kit(Rabbit, SP-0023) and DAB (C-0010) staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.