

Alexa Fluor® 647 anti-IBA1 Antibody

Catalog# / Size	615353 / 25 tests 615354 / 100 tests
Clone	A19290E
Regulatory Status	RUO
Other Names	IBA1, Allograft Inflammatory Factor 1, IRT-1, Interferon Gamma Responsive Transcript
Isotype	Mouse IgG2a, κ
Description	As a cytoplasmic scaffold protein, IBA1 contains Ca ²⁺ binding EF-hand and PDZ interaction domains, which are important for mediating intracellular signaling complexes. IBA1, also known as AIF-1, was first observed in rodent microglial cells and has been shown to stain cells in both normal and pathological lesions in rodents. In addition to the central nervous system, IBA1 has also been shown to stain in macrophage subpopulations. In macrophages, expression of IBA1 promotes pro-inflammatory responses. In microglial cells, IBA1 is important in the modulation of synaptic activities and is upregulated in response to nerve damage.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Synthetic peptide from human IBA1
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions.
Concentration	0.5 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	ICFC - Quality tested
Recommended Usage	<p>Each lot of this antibody is quality control tested by intracellular flow cytometry using our Cyto-Fast™ Fix/Perm Buffer Set. For flow cytometric staining, the suggested use of this reagent is 5 µL per 10⁶ cells in 100 µl volume. It is highly recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.</p> <p>Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p>View full statement regarding label licenses</p>
Excitation Laser	Red Laser (633 nm)
Application Notes	<p>For use in intracellular flow cytometry (ICFC), it is recommended to fix/permeabilize with Cyto-Fast™ Fix/Perm Buffer Set (Cat. No. 426803).</p> <p>It is not recommended using this product in immunocytochemistry (ICC) or immunohistochemistry on FFPE tissues (IHC-P).</p> <p>This antibody clone does not detect mouse or rat IBA1 in intracellular flow cytometry (ICFC).</p>

RRID AB_3699062 (BioLegend Cat. No. 615353)
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Antigen Details

Structure	IBA1 is a 147 amino acid protein with a predicted molecular weight of 17 kD.
Distribution	Expressed in microglia and macrophages
Function	Plays a role in inflammatory response and modulates synaptic activities
Interaction	Interacts with LCP1
Ligand/Receptor	Calcium
Cell Type	Lymphocytes, Macrophages, Microglia, T cells
Biology Area	Apoptosis/Tumor Suppressors/Cell Death, Cell Death, Immunology, Innate Immunity, Neuroinflammation, Neuroscience, Neuroscience Cell Markers, Synaptic Biology
Molecular Family	Innate Immune Signaling
Antigen References	<ol style="list-style-type: none">1. Elizondo D. M. <i>et al.</i> 2017. <i>Front Immunol.</i> 8:1502.2. Mikkelsen HB, <i>et al.</i> 2017. <i>Anat Rec (Hoboken)</i>. 300:1114-1122.3. Shapiro LA, <i>et al.</i> 2009. <i>Brain Res.</i> 1266:29-36.

Gene ID [199](#)

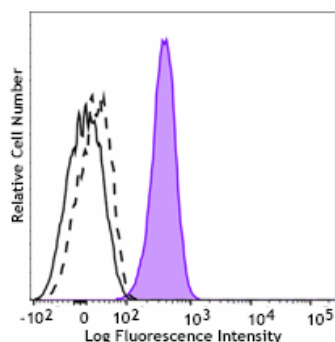
Related Protocols

- [Intracellular Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-IBA1, Alexa Fluor® 647 anti-IBA1 Antibody

Product Data



THP-1 cells (filled histogram, positive control) and HeLa cells (open histogram, negative control) were fixed then intracellularly stained with Alexa Fluor® 647 anti-IBA1 (clone A19290E). THP-1 cells were also stained with the control antibody Alexa Fluor® 647 Mouse IgG2a, κ Isotype Control (open histogram, dashed line) (Cat. No. 400234).

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