




Product datasheet

Anti-Iba1 antibody ab5076

★★★★☆ [100 Abreviews](#) [1145 References](#) [4 Images](#)

Overview

Product name	Anti-Iba1 antibody
Description	Goat polyclonal to Iba1
Host species	Goat
Specificity	<p>ab5076 is expected to recognize the isoforms represented by NP_001614 and NP_116573 but not NP_004838.</p> <p>Although we received several excellent papers on ab5076 working with rat IHC-P, rat is not a batch tested species for IHC-P and we cannot guarantee.</p>
Tested applications	Suitable for: IHC-P, WB
Species reactivity	Reacts with: Rat, Human Predicted to work with: Pig, Macaque monkey 
Immunogen	<p>Synthetic peptide corresponding to Human Iba1 aa 135-147 (C terminal). Accession Number(s): NP_116573.1; NP_001614.3</p> <p>Sequence:</p> <p>C-TGPPAKKAISELP</p> <p>Database link: P55008 (Peptide available as ab23067)</p> <p> Run BLAST with  Run BLAST with</p>
Positive control	WB: Human lymph node and rat brain tissue lysate. IHC-P: Human spleen tissue.
General notes	<p>The Iba1 antibody (ab5076) is commonly used as a marker of microglia activation in staining and immunohistochemistry, given that ionized calcium binding adaptor molecule 1 (Iba1) is a microglia/macrophage-specific calcium-binding protein with actin-bundling activity that participates in membrane ruffling and phagocytosis in activated microglia.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: Tris buffered saline, 0.5% BSA
Purity	Immunogen affinity purified
Purification notes	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.
Clonality	Polyclonal
Isotype	IgG

Applications

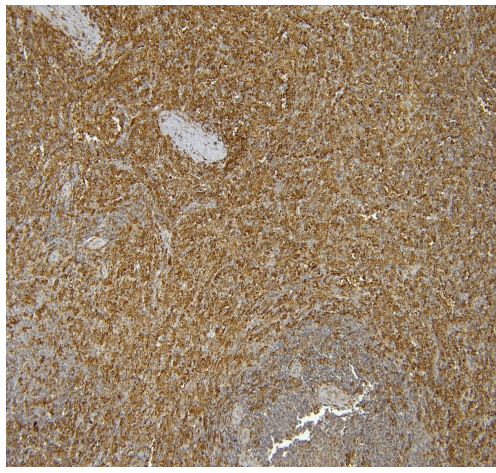
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab5076 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★★ (28)	Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Although we received several excellent papers on ab5076 working with rat IHC-P, rat is not a batch tested species for IHC-P and we cannot guarantee.
WB	★★★★★ (7)	Use a concentration of 1 - 3 µg/ml. Detects a band of approximately 16-17 kDa (predicted molecular weight: 17 kDa). A 1 hour primary incubation is recommended for this product. We received several excellent Abreviews on this antibody working with mouse, however, mouse is not a batch tested species and we cannot guarantee that this antibody will work on mouse. Some of our customers have observed high background in mouse

Target

Function	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.
Tissue specificity	Detected in T-lymphocytes and peripheral blood mononuclear cells.
Sequence similarities	Contains 2 EF-hand domains.
Post-translational modifications	Phosphorylated on serine residues.
Cellular localization	Cytoplasm > cytoskeleton. Cell projection > ruffle membrane. Associated with the actin

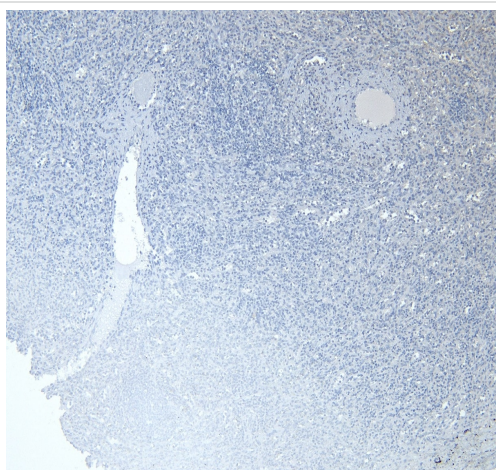
Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Iba1 antibody (ab5076)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human spleen tissue labelling Iba1 with ab5076 at 8µg/ml.

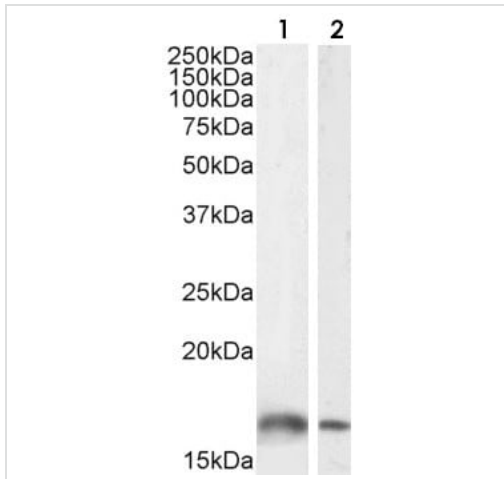
Heat induced antigen retrieval with citrate buffer Ph 6, HRP-staining.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Iba1 antibody (ab5076)

Negative control: Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human spleen tissue labelling Iba1 with no primary antibody.

Heat induced antigen retrieval with citrate buffer Ph 6, HRP-staining.



Western blot - Anti-Iba1 antibody (ab5076)

All lanes : Anti-Iba1 antibody (ab5076) at 1 µg/ml

Lane 1 : Human lymph node tissue lysate in RIPA buffer

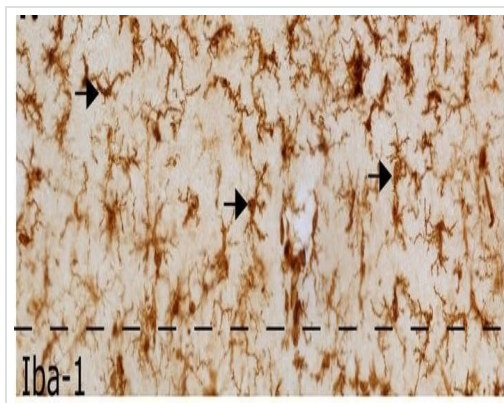
Lane 2 : Rat brain tissue lysate in RIPA buffer

Lysates/proteins at 35 µg per lane.

Developed using the ECL technique.

Predicted band size: 17 kDa

Detected by chemiluminescence.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Iba1 antibody (ab5076)

Image from Iris Margalit Trutzer et al, *ACTA neuropathologica communications*, 7, 40, Fig. 7; doi: 10.1186/s40478-019-0684-8

Immunohistochemical analysis of formalin-fixed, paraffin-embedded human lateral prefrontal cortex tissue labeling Iba1 labeled microglia (labeled with black arrows) within the cortex using ab5076 at 1/1000 dilution. (Cropped image).

Sections were rinsed in 0.01 m PBS, pH 7.4, followed by 10% serum matching the species of the secondary antibody, 5% bovine serum albumin, and 0.1% Triton X-100 in 0.01 m PBS blocking solution for 1 h and incubated for 2 days at 4 °C in primary antibody. The sections were rinsed in PBS and incubated overnight at 4 °C with a horse anti-Goat IgG (Biotinylated) secondary antibody.

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