




### Anti-Iba1 antibody ab5076

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

#### Overview

<b>Product name</b>	Anti-Iba1 antibody
<b>Description</b>	Goat polyclonal to Iba1
<b>Host species</b>	Goat
<b>Specificity</b>	<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>
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, WB
<b>Species reactivity</b>	<p><b>Reacts with:</b> Rat, Human</p> <p><b>Predicted to work with:</b> Pig, Macaque monkey </p>
<b>Immunogen</b>	<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: <a href="#">P55008</a> (Peptide available as <a href="#">ab23067</a>)</p> <p> <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a></p>
<b>Positive control</b>	WB: Human lymph node and rat brain tissue lysate. IHC-P: Human spleen tissue.
<b>General notes</b>	<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&amp;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.

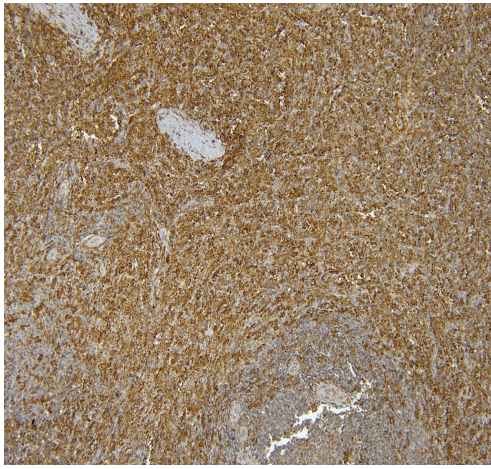
Application	Abreviews	Notes
IHC-P	★★★★★ (28)	Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Although we received several excellent papers on ab5076 working with rat IHC-P, rat is not a batch tested species 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

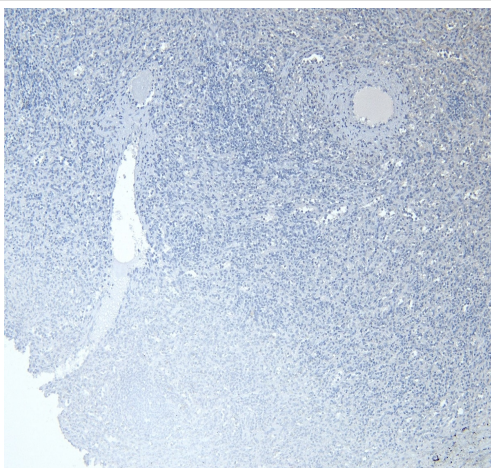
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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Iba1 antibody (ab5076)

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

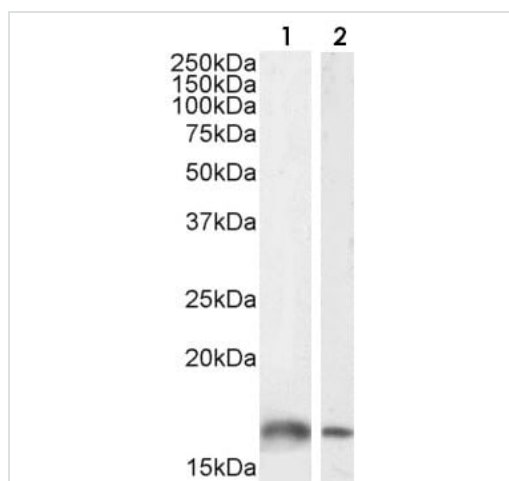
Heat induced antigen retrieval with citrate buffer Ph 6, HRP-staining.



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

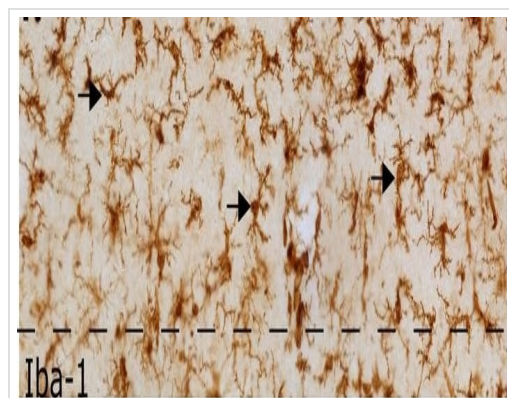
**Lane 2 :** Rat brain tissue lysate in RIPA buffer

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.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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