### Reconstitution/Storage

<table>
<thead>
<tr>
<th>Applications</th>
<th>WB: 1 : 1000 (AP staining)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHC:</td>
<td>1 : 1000</td>
</tr>
<tr>
<td>IHC-P/FFPE:</td>
<td>1 : 200 up to 1 : 2000</td>
</tr>
</tbody>
</table>

### Immunogen

| Synthetic peptide corresponding to AA 134 to 147 from rat IBA1 (UniProt Id: P55009) |

### Reactivity

| Reacts with:     | human (P55008), rat (P55009), mouse (O70200). Other species not tested yet. |

### Specificity

| Specificity | Specific for IBA 1. |

### TO BE USED IN VITRO / FOR RESEARCH ONLY

**NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS**

Ionized calcium-binding adaptor molecule 1 (IBA 1) or allograft inflammatory factor 1 (AIF 1) is an EF hand calcium binding protein which is expressed selectively in microglia/macrophages. Microglia are the smallest of the glial cell types in the central nervous system with cell bodies of only 2-5 µm in diameter. IBA 1 expression has been suggested to be associated with the neuroinflammatory response and with transplant rejection.

**Selected References SYSY Antibodies**

Distinct in vivo roles of secreted APP ectodomain variants APPsα and APPsβ in regulation of spine density, synaptic plasticity, and cognition.


Memantine treatment of juvenile rats with kaolin-induced hydrocephalus.

Di Curzio DL, Nagra G, Mao X, Del Bigio MR

Brain research (2018) 1689: 54-62. \(\text{IHC-P, tested species: rat}\)

p75NTR regulates brain mononuclear cell function and neuronal structure in Toxoplasma infection-induced neuroinflammation.


GLIA (2019) 67(1): 193-211. \(\text{IHC, tested species: mouse}\)

Widespread transduction of astrocytes and neurons in the mouse central nervous system after systemic delivery of a self-complementary AAV-PHP.B vector.

Rincon MV, de Vin F, Duque SJ, Fripont S, Castaldo S, Bouchuizen-Wenger J, Holt MG

Gene therapy (2018) ... \(\text{IHC, tested species: mouse}\)

Microglial Ramification, Surveillance, and Interleukin-1β Release Are Regulated by the Two-Pore Domain K+ Channel THIK-1.

Madry C, Kyrargyri V, Arancibia-Cárcamo IL, Jolivet R, Kohsaka S, Bryan RM, Attwell D


p33 in AgRP neurons is required for protection against diet-induced obesity via JNK1.


Nature communications (2018) 9(1): 3432. \(\text{IHC, tested species: mouse}\)

Chronic near lifetime toluene exposure in rodents does not replicate solvent abuse leukoencephalopathy in humans.

Ranson MA, Del Bigio MR

Neurotoxicology (2018) ... \(\text{IHC, tested species: rat}\)


Evanos NK, Guilhaume-Correa F, Herman JP, Goodman MD

PloS one (2018) 13(5): e0197346. \(\text{IHC, tested species: mouse}\)

Interaction of complement system and microglia activation in retina and optic nerve in a NMDA damage model.


Molecular and cellular neuroscience (2018) ... \(\text{IHC, tested species: mouse}\)

Long-Term Neuroinflammation Induced by Influenza A Virus Infection and the Impact on Hippocampal Neuron Morphology and Function.


Effects of the ecto-ATPase apyrase on microglial ramification and surveillance reflect cell depolarization, not ATP depletion.

Madry C, Arancibia-Cárcamo IL, Kyrargyri V, Chan VTT, Hamilton NB, Attwell D

Proceedings of the National Academy of Sciences of the United States of America (2018) 115(7): E1608-E1617. \(\text{IHC, tested species: rat}\)

High fat diet treatment impairs hippocampal long-term potentiation without alterations of the core neuropharmacological features of Alzheimer disease.


Neurobiology of disease (2018) 113: 82-96. \(\text{WB, tested species: mouse}\)

Deficiency of leptin receptor in myeloid cells disrupts hypothalamic metabolic circuits and causes body weight increase.
