

**Iba1/AIF-1 (E5N4J) Mouse mAb**

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<b>Applications:</b> IHC-Bond, IHC-P	<b>Reactivity:</b> H Mk	<b>Sensitivity:</b> Endogenous	<b>Source/Isotype:</b> Mouse IgG1 kappa	<b>UniProt ID:</b> #P55008	<b>Entrez-Gene Id:</b> 199
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**Product Usage Information****Application**

IHC Leica Bond  
Immunohistochemistry (Paraffin)

**Dilution**

1:100 - 1:400  
1:100 - 1:400

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. *Store at -20°C. Do not aliquot the antibody.*

For a carrier free (BSA and azide free) version of this product see product #26423.

**Specificity/Sensitivity**

Iba1/AIF-1 (E5N4J) Mouse mAb recognizes endogenous levels of total Iba1/AIF-1 protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu32 of human Iba1/AIF-1 protein.

**Background**

Ionized calcium-binding adaptor molecule 1 (Iba1), also known as allograft inflammatory factor 1 (AIF-1), is an evolutionarily conserved cytoplasmic calcium binding protein containing a central pair of EF-hand calcium binding motifs (1,2). Iba1/AIF-1 was originally cloned from activated macrophages in human atherosclerotic allogenic heart grafts undergoing chronic transplant rejection as well as from rat monocytes (3,4). Its function is not very well understood, but Iba1/AIF-1 expression is upregulated in response to interferon-gamma and, therefore, could modulate macrophage-dependent immune response (3). As an F-actin-binding protein, Iba1/AIF-1 may function to remodel the actin cytoskeleton and contribute to morphological changes that correlate with various microglial/macrophage states (5). Iba1/AIF-1 is also uniquely expressed in cells of monocytic lineage and is, therefore, widely used as a marker for microglia/macrophages in the brain and other tissue (6).

**Background References**

- Schulze, J.O. et al. (2008) *FEBS J* 275, 4627-40.
- Deininger, M.H. et al. (2002) *FEBS Lett* 514, 115-21.
- Utans, U. et al. (1995) *J Clin Invest* 95, 2954-62.
- Imai, Y. et al. (1996) *Biochem Biophys Res Commun* 224, 855-62.
- Kanazawa, H. et al. (2002) *J Biol Chem* 277, 20026-32.
- Ito, D. et al. (1998) *Brain Res Mol Brain Res* 57, 1-9.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Applications Key**

**IHC-Bond:** IHC Leica Bond **IHC-P:** Immunohistochemistry (Paraffin)

**Cross-Reactivity Key**

**H:** Human **Mk:** Monkey

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