Revision 6

Store at -20C

#17198

Iba1/AIF-1 (E4O4W) XP® Rabbit mAb

Cell Signaling TECHNOLOGY®

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, W-S, IP, IHC-Bond, IHC-P, IF-F, IF-IC, FC-FP	H M R Hm Mk	Endogenous	17	Rabbit IgG	#P55008	199

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Simple Western™	1:10 - 1:50
Immunoprecipitation	1:50
IHC Leica Bond	1:800 - 1:3200
Immunohistochemistry (Paraffin)	1:800 - 1:3200
Immunofluorescence (Frozen)	1:50 - 1:200
Immunofluorescence (Immunocytochemistry)	1:50 - 1:200
Flow Cytometry (Fixed/Permeabilized)	1:50 - 1:200

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 #79394.

Specificity/Sensitivity

Iba1/AIF-1 (E4O4W) XP® Rabbit 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 Ala139 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

1. Schulze, J.O. et al. (2008) *FEBS J* 275, 4627-40.
2. Deininger, M.H. et al. (2002) *FEBS Lett* 514, 115-21.
3. Utans, U. et al. (1995) *J Clin Invest* 95, 2954-62.
4. Imai, Y. et al. (1996) *Biochem Biophys Res Commun* 224, 855-62.
5. Kanazawa, H. et al. (2002) *J Biol Chem* 277, 20026-32.
6. 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).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **W-S:** Simple Western™ **IP:** Immunoprecipitation **IHC-Bond:** IHC Leica Bond **IHC-P:** Immunohistochemistry (Paraffin) **IF-F:** Immunofluorescence (Frozen) **IF-IC:** Immunofluorescence (Immunocytochemistry) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Hm:** Hamster **Mk:** Monkey

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