

Iba1 (FL-147): sc-98468

BACKGROUND

Ionized calcium-binding adapter molecule 1 (Iba1), also known as allograft inflammatory factor-1 (AIF-1), is a 147 amino acid cytoplasmic, calcium-binding protein that is thought to play a role in macrophage activation and function. Iba1, containing two EF domains, is induced by cytokines and interferons. In an unstimulated state, Iba1 colocalizes with actin, and upon stimulation, translocates to lamellipodia. It is also a marker of human microglia and is expressed by macrophages in injured skeletal muscle. The gene encoding Iba1 maps to chromosome 6p21.33 and resides in the tumor necrosis factor (TNF) cluster of genes located in the region represented by the human major histocompatibility complex (MHC).

REFERENCES

1. Autieri, M.V. 1996. cDNA cloning of human allograft inflammatory factor-1: tissue distribution, cytokine induction, and mRNA expression in injured rat carotid arteries. *Biochem. Biophys. Res. Commun.* 228: 29-37.
2. Autieri, M.V. and Agrawal, N. 1998. IRT-1, a novel interferon- γ -responsive transcript encoding a growth-suppressing basic leucine zipper protein. *J. Biol. Chem.* 273: 14731-14737.
3. Neville, M.J., et al. 1999. A new member of the Ig superfamily and a V-ATPase G subunit are among the predicted products of novel genes close to the TNF locus in the human MHC. *J. Immunol.* 162: 4745-4754.

CHROMOSOMAL LOCATION

Genetic locus: AIF1 (human) mapping to 6p21.33; Aif1 (mouse) mapping to 17 B1.

SOURCE

Iba1 (FL-147) is a rabbit polyclonal antibody raised against amino acids 1-147 representing full length Iba1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Iba1 (FL-147) is recommended for detection of Iba1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Iba1 (FL-147) is also recommended for detection of Iba1 in additional species, including equine, canine, bovine and porcine.

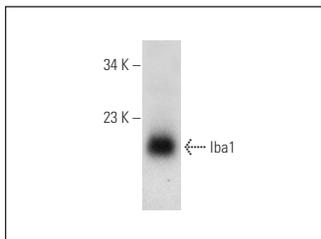
Suitable for use as control antibody for Iba1 siRNA (h): sc-43857, Iba1 siRNA (m): sc-62484, Iba1 shRNA Plasmid (h): sc-43857-SH, Iba1 shRNA Plasmid (m): sc-62484-SH, Iba1 shRNA (h) Lentiviral Particles: sc-43857-V and Iba1 shRNA (m) Lentiviral Particles: sc-62484-V.

Molecular Weight of Iba1: 17 kDa.

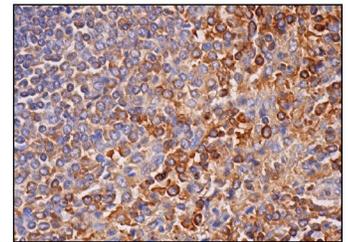
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Iba1 (FL-147): sc-98468. Western blot analysis of Iba1 expression in human PBL whole cell lysate.



Iba1 (FL-147): sc-98468. Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic staining of cells in white pulp and cytoplasmic and membrane staining of cells in red pulp.

SELECT PRODUCT CITATIONS

1. Brevet, M., et al. 2010. Chronic foot-shock stress potentiates the influx of bone marrow-derived microglia into hippocampus. *J. Neurosci. Res.* 88: 1890-1897.
2. Laperchia, C., et al. 2013. Two-photon microscopy imaging of thy1GFP-M transgenic mice: a novel animal model to investigate brain dendritic cell subsets *in vivo*. *PLoS ONE* 8: e56144.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **Iba1 (1022-5): sc-32725** or **Iba1 (F-4): sc-398406**, our highly recommended monoclonal alternatives to Iba1 (FL-147). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Iba1 (1022-5): sc-32725**.