

Iba1 (N-20): sc-28528

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

- Utans, U., et al. 1995. Cloning and characterization of allograft inflammatory factor-1: a novel macrophage factor identified in rat cardiac allografts with chronic rejection. *J. Clin. Invest.* 95: 2954-2962.
- 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.
- 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.
- Deininger, M.H., et al. 2000. Allograft inflammatory factor-1 defines a distinct subset of infiltrating macrophages/microglial cells in rat and human gliomas. *Acta Neuropathol.* 100: 673-680.
- Kuschel, R., et al. 2000. Allograft inflammatory factor-1 is expressed by macrophages in injured skeletal muscle and abrogates proliferation and differentiation of satellite cells. *J. Neuropathol. Exp. Neurol.* 59: 323-332.
- Postler, E., et al. 2000. Allograft inflammatory factor-1 is upregulated in microglial cells in human cerebral infarctions. *J. Neuroimmunol.* 108: 244-250.

CHROMOSOMAL LOCATION

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

SOURCE

Iba1 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Iba1 of human origin.

RESEARCH USE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-28528 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Iba1 (C-20) is recommended for detection of Iba1 (also designated AIF-1) of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 (C-20) is also recommended for detection of Iba1 (also designated AIF-1) in additional species, including equine, canine, bovine and porcine.

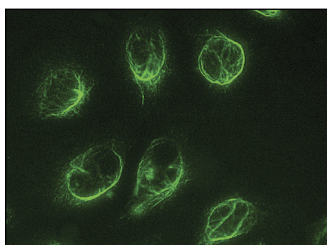
Suitable for use as control antibody for Iba1 siRNA (h): sc-43857, Iba1 siRNA (m): sc-62484, Iba1 shRNA Plasmid (h): sc-43857-SH, Iba1 shRNA Plasmid (m): sc-62484-SH, Iba1 shRNA (h) Lentiviral Particles: sc-43857-V and Iba1 shRNA (m) Lentiviral Particles: sc-62484-V.

Molecular Weight of Iba1: 17 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Iba1 (N-20): sc-28528. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoskeletal localization.

STORAGE

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

MONOS
Satisfaction
Guaranteed

Try **Iba1 (1022-5): sc-32725** or **Iba1 (F-4): sc-398406**, our highly recommended monoclonal alternatives to Iba1 (N-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Iba1 (1022-5): sc-32725**.