iFluor™ 488 Conjugated Anti-Iba1 Antibody [JM36-62]

HA720158F

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	IF-Cell, FC
Molecular Wt:	Predicted band size: 17 kDa
Clone number:	JM36-62

Description: 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).

Conjugate: iFluor™ 488, Ex: 491nm; Em: 516nm.

Immunogen: Synthetic peptide within N-terminal human Iba1.

Positive control: SH-SY5Y, RAW264.7, J774A.1.

Subcellular location: Cytoskeleton, ruffle membrane, phagocytic cup.

Database links: SwissProt: P55008 Human | O70200 Mouse | P55009 Rat

Recommended Dilutions:

IF-Cell	1:100-1:250
FC	1:500-1:1,000

Storage Buffer: Preservative: 0.02% Sodium azide Constituents: 30% Glycerol, 1% BSA, 68.98% PBS

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

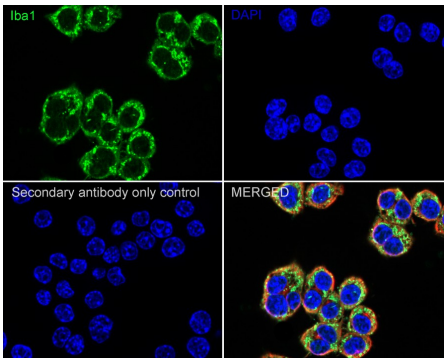

Fig1: Immunocytochemistry analysis of RAW264.7 cells labeling Iba1 with Rabbit anti-Iba1 antibody (HA720158F) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-Iba1 antibody (HA720158F) at 1/100 dilution in 1% BSA in PBST overnight at 4 ℃. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

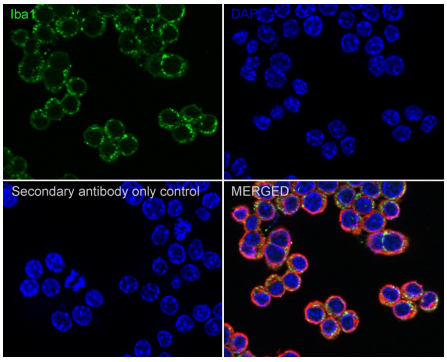

Fig2: Immunocytochemistry analysis of J774A.1 cells labeling Iba1 with Rabbit anti-Iba1 antibody (HA720158F) at 1/250 dilution.

Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-Iba1 antibody (HA720158F) at 1/250 dilution in 1% BSA in PBST overnight at 4 ℃. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (M1305-2, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

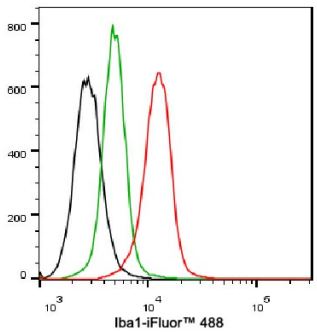

Fig3: Flow cytometric analysis of SH-SY5Y cells labeling Iba1.

Cells were fixed and permeabilized. Then incubated for 30 minutes at +4℃ with Iba1 (HA720158F, red, 1ug/ml) and Rabbit IgG Isotype Control (iFluor™ 488, green, 1ug/ml). Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Background References

1. Hennessy E et al. Systemic TNF-a produces acute cognitive dysfunction and exaggerated sickness behavior when superimposed upon progressive neurodegeneration. Brain Behav Immun 59:233-244 (2017).
2. Arentsen T et al. The bacterial peptidoglycan-sensing molecule Pglyrp2 modulates brain development and behavior. Mol Psychiatry 22:257-266 (2017).