Iba1 Recombinant Antibody [JM36-62] - Guinea pig IgG2 (Chimeric)

HA601368

Product Type:	Recombinant Chimeric Antibody, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	IHC-Fr, WB
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).

Immunogen: Synthetic peptide within N-terminal human Iba1.

Positive control: Mouse brain tissue, mouse hippocampus tissue, THP-1 cell lysates.

Subcellular location: Cytoplasm, cytoskeleton, Cell projection, ruffle membrane, Cell projection, phagocytic cup.

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

Recommended Dilutions:

IHC-Fr	1:100-1:500
WB	1:1,000

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

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

Purity: Protein A affinity purified.

Images

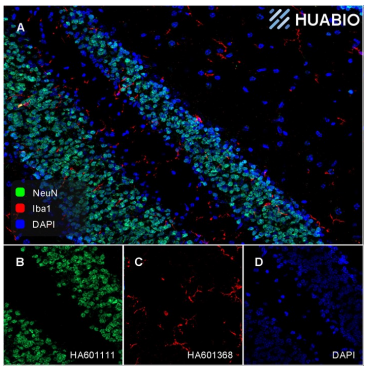

Fig1: Immunofluorescence analysis of frozen mouse cerebellum tissue labeling Iba1 with Guinea pig anti-Iba1 antibody (HA601368).

Important Notice: Antigen retrieval is not required before IHC-Fr staining.

The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with the primary antibody (HA601368, red) at 1/500 dilution overnight at 4 ℃, washed with PBS. Rabbit anti-Guinea pig IgG (H&L)-Alexa Fluor® 594 was used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

Mouse anti-NeuN antibody (HA601111, green) was stained at 1/500 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 488, HA1125) was used as the secondary antibody at 1/1,000 dilution.

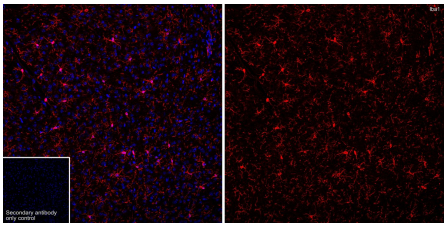

Fig2: Immunofluorescence analysis of frozen mouse brain tissue labeling Iba1 with Guinea pig anti-Iba1 antibody (HA601368) at 1/500 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for about 2 minutes in microwave oven. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with the primary antibody (HA601368, red) at 1/500 dilution overnight at 4 ℃, washed with PBS. Rabbit anti-Guinea pig IgG (H&L)-Alexa Fluor® 594 was used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

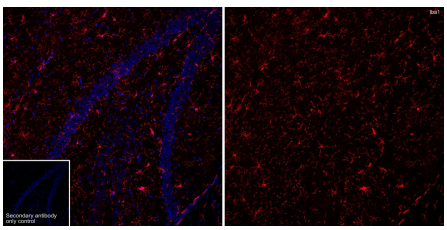

Fig3: Immunofluorescence analysis of frozen mouse hippocampus tissue labeling Iba1 with Guinea pig anti-Iba1 antibody (HA601368) at 1/500 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) for about 2 minutes in microwave oven. The tissues were blocked in 10% negative goat serum for 1 hour at room temperature, washed with PBS, and then probed with the primary antibody (HA601368, red) at 1/500 dilution overnight at 4 ℃, washed with PBS. Rabbit anti-Guinea pig IgG (H&L)-Alexa Fluor® 594 was used as the secondary antibody at 1/1,000 dilution. Nuclei were counterstained with DAPI (blue).

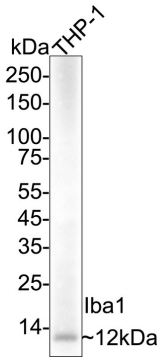

Fig4: Western blot analysis of Iba1 on THP-1 cell lysates with Guinea pig anti-Iba1 antibody (HA601368) at 1/1,000 dilution.

Lysates/proteins at 10 µg/Lane.

Predicted band size: 17 kDa
Observed band size: 12 kDa

Exposure time: 2 minutes; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA601368) at 1/1,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Rabbit anti-Guinea pig IgG - HRP Secondary Antibody (HA1021) at 1/5,000 dilution was used for 1 hour at room temperature.

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).