IMMUNOLOGICAL SCIENCES

Product Data Sheet

AB-84297 **IBA1 Polyclonal antibody**

Size: 100µg

Concentration: 1mg/ml

Host: Rabbit

IsoType: IgG

Form: liquid

Purification: Immunogen affinity purified

Species: Human, Mouse, Rat

Background: AIF1, also named as G1, IBA1 or daintain/AIF-1, is a 143 amino acid cytoplasmic, inflammation response scaffold protein. It is constitutively expressed in monocytes and macrophages and is known to be involved in macrophage activation. It is a marker of activated macrophage. Despite a lack of detailed knowledge on the in vivo physiological functions of AIF-1, there is growing evidence that shows its aberrant expression contributes to the pathogenesis of many autoimmune diseases, including rheumatoid arthritis. (20944424). AIF1 is an actin-binding protein that enhances membrane ruffling and RAC activation. It enhances lymphocyte migration and the actin-bundling activity of LCP1. AIF1 plays a role in RAC signaling and in phagocytosis and a role in vascular inflammation. AIF1 promotes the proliferation of vascular smooth muscle cells and of T-lymphocytes. It is also as a microglial cell marker.

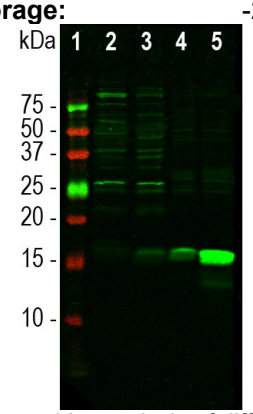
Immunogen: Peptide identical to the C-terminal of human IBA1 coupled to KLH

Synonyms: AIF 1, AIF1, G1, IBA1, IRT 1, Protein G1

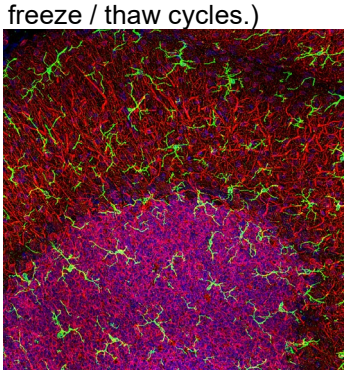
Observed MW: 17 kDa

Applications:
Western Blot: 1:1,000-2,000
Immunohistochemistry: 1:500
Immunoflorescence: 1:1,000-3,000.

Buffer: Supplied as an aliquot of serum plus 5mM NaN3
Storage: -20℃ for 12 months (Avoid repeated freeze / thaw cycles.)



Western blot analysis of different tissue lysates using rabbit pAb to IBA1, dilution 1:1,000 in green: [1] protein standard (red), [2] mouse brain, [3] rat brain, [4] mouse spleen, and [5] rat spleen. The band at about 15kDa mark corresponds to IBA1 protein. IBA1 is a relatively minor protein of brain and is much more abundant in spleen, so the 15kDa band is less obvious in CNS lysates. The other bands seen in the CNS lysates are of unknown origin but do not appear to compromise the microglial specific staining seen with this antibody.



High magnification stacked confocal image of rat cerebellar molecular layer at top and granular layer below, stained with IBA1, dilution 1:1,000, in green. Microglia are very small cells with fine processes spreading in three dimensions and so are best visualized in a confocal Z stack. Red shows the processes of Purkinje cells and the perikarya of granule cells revealed with CPCA-MAP2, an antibody to MAP2, 1:5,000. Nuclear DNA is shown with DAPI stain in blue.

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