

Recombinant Rat AIF1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52397

Size: 10ug, 100ug

Protein Name: Allograft inflammatory factor 1 (AIF-1) (Ionized calcium-binding adapter molecule 1) (MRF-1) (Microglia response factor)

Synonym: Aif1, Iba1, Mrf1

UniProt ID: P55009

UniProt Link: www.uniprot.org/uniprotkb/P55009/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 147 AA

Molecular Weight: 17 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MSQSKDLQGGKAFGLLKAQQEERLDGINKHFLDDPKYSSDEDLQSKLEAFKTKYMEFDLNGNGDIDI
MSLKRMLEKLGVPKTHLELKKLIREVSSGSEETFSYSDFLRMMLGKRSAILRMILMYEKNKEHQKPT
GPPAKKAISELP

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Allograft inflammatory factor 1 (AIF-1) (Ionized calcium-binding adapter molecule 1) (MRF-1) (Microglia response factor) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Actin-binding protein that enhances membrane ruffling and RAC activation. Enhances the actin-bundling activity of LCP1. Binds calcium. Plays a role in RAC signaling and in phagocytosis. May play a role in macrophage activation and function. Promotes the proliferation of vascular smooth muscle cells and of T-lymphocytes. Enhances lymphocyte migration. Plays a role in vascular inflammation (By similarity).

Subcellular Localization: Cytoplasm, cytoskeleton . Cell projection, ruffle membrane ; Peripheral membrane protein ; Cytoplasmic side . Cell projection, phagocytic cup . Note=Associated with the actin cytoskeleton at membrane ruffles and at sites of phagocytosis.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.