

Recombinant Mouse AKIR2 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51112

Size: 10ug, 100ug

Protein Name: Akirin-2

Synonym: Akirin2

UniProt ID: B1AXD8

UniProt Link: www.uniprot.org/uniprotkb/B1AXD8/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 201 AA

Molecular Weight: 22 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MACGATLKRTLDFDPLLSPASPKRRRCAPLSAPASAAASPAATAAAAAASAAAASPQKYLRMEPSPF
GDVSSRLTTEQILYNIKQEYKRMQKRRHLEASFQQADPGCTSDSQPHAFLISGPASPGTSSATSSPL
KKEQPLFTLRQVGMICERLLKEREEKVREEYEEILNTKLAEQYDAFVKFTHDQIMRRYGEQPASYVS

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 Akirin-2 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: Molecular adapter that acts as a bridge between a variety of multiprotein complexes, and which is involved in embryonic development, immunity, myogenesis and brain development (PubMed:25107474, PubMed:26041538, PubMed:27871306, PubMed:30116001, PubMed:30801883). Plays a key role in nuclear protein degradation by promoting import of proteasomes into the nucleus: directly binds to fully assembled 20S proteasomes at one end and to nuclear import receptor IPO9 at the other end, bridging them together and mediating the import of pre-assembled proteasome complexes through the nuclear pore (By similarity). Involved in innate immunity by regulating the production of interleukin-6 (IL6) downstream of Toll-like receptor (TLR): acts by bridging the NF-kappa-B inhibitor NFKBIZ and the SWI/SNF complex, leading to promote induction of IL6 (PubMed:18066067, PubMed:25107474). Also involved in adaptive immunity by promoting B-cell activation (PubMed:26041538). Involved in brain development: required for the survival and proliferation of cerebral cortical progenitor cells (PubMed:27871306). Involved in myogenesis: required for skeletal muscle formation and skeletal development, possibly by regulating expression of muscle differentiation factors (PubMed:30801883). Also plays a role in facilitating interdigital tissue regression during limb development (PubMed:30116001).

Subcellular Localization: Nucleus . Cytoplasm . Membrane . Note=Present mainly in the nuclear fraction, and at much lower level in the cytoplasmic and membrane fractions.

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.