

Recombinant Mouse IL1AP Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51652

Size: 10ug, 100ug

Protein Name: Interleukin-1 receptor accessory protein (IL-1 receptor accessory protein) (IL-1RAcP) (EC 3.2.2.6) (Interleukin-33 receptor beta chain)

Synonym: Il1rap

UniProt ID: Q61730

UniProt Link: www.uniprot.org/uniprotkb/Q61730/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 570 AA

Molecular Weight: 66 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MGLLWYLM SLSFY GILQSHASERCDDWGLDTMRQIQVFEDEPARIKCPLFEHFLKYNYSTAHSSGLT
LIWYWTRQDRDLEEPINFRLPENRISKEKDVLFWRPTLLNDTGNYTCMLRNTTYCSKVAFPLEV VQK
DSCFNSAMRFPVHKMYIEHGIHKITCPNVDGYFPSSVKPSVTWYKGCTEIVDFHNVLP EGMNLSFFIP
LVSNNGN YTCVVTPENGRLFHLTRTVTVKVVGSPKDALPPQIYSPNDRVVYEKEPGEELVIPCKVY
FSFIMDSHNEVWWTIDGKKPDDVTVDITINESVSYSSTEDET RTQILSIKKVTPEDLR RN YVCHARNTK
GEAEQAAKVKQKVIPPRYTVELACGFGATVFLVVVLIVVYHVYWLEMVLFYRAHFGTDE TILDGKEYD
IYVSYARNVEEEEFVLLTLRGVLENEFGYKLCIFDRDSLPGGIVTDETL SFIQKSRRLLVVLSPNYVLQ
GTQALLELKAGLENMASRGNINVLVQYKAVKDMKV KELKRAKTVLTVIKWKGEKSKYPQGRFWKQL
QVAMPVKKSPRWSSNDKQGLSYSSLKNV

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 Interleukin-1 receptor accessory protein (IL-1 receptor accessory protein) (IL-1RAcP) (EC 3.2.2.6) (Interleukin-33 receptor beta chain) 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: Coreceptor for IL1RL2 in the IL-36 signaling system. Coreceptor with IL1R1 in the IL-1 signaling system. Associates with IL1R1 bound to IL1B to form the high affinity interleukin-1 receptor complex which mediates interleukin-1-dependent activation of NF-kappa-B and other pathways. Signaling involves the recruitment of adapter molecules such as TOLLIP, MYD88, and IRAK1 or IRAK2 via the respective TIR domains of the receptor/coreceptor subunits. Recruits TOLLIP to the signaling complex. Does not bind to interleukin-1 alone; binding of IL1RN to IL1R1, prevents its association with IL1R1 to form a signaling complex. The cellular response is modulated through a non-signaling association with the membrane IL1R2 decoy receptor. Secreted forms (isoforms 2 and 3) associate with secreted ligand-bound IL1R2 and increase the affinity of secreted IL1R2 for IL1B; this complex formation may be the dominant mechanism for neutralization of IL1B by secreted/soluble receptors. Coreceptor for IL1RL1 in the IL-33 signaling system. Can bidirectionally induce pre- and postsynaptic differentiation of neurons by trans-synaptically binding to PTPRD (PubMed:25908590). May play a role in IL1B-mediated costimulation of IFNG production from T-helper 1 (Th1) cells (By similarity).; [Isoform 2]: Associates with secreted ligand-bound IL1R2 and increases the affinity of secreted IL1R2 for IL1B; this complex formation may be the dominant mechanism for neutralization of IL1B by secreted/soluble receptors. Enhances the ability of secreted IL1R1 to inhibit IL-33 signaling.; [Isoform 3]: Required for Src phosphorylation by IL1B. Required for IL1B-potentiated NMDA-induced calcium influx in neurons acting in cooperation with IL1R1 isoform 2 to mediate Akt kinase activation.

Subcellular Localization: [Isoform 1]: Cell membrane; Single-pass type I membrane protein.; [Isoform 2]: Secreted.

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.