

Recombinant Mouse IL1R1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51272

Size: 10ug, 100ug

Protein Name: Interleukin-1 receptor type 1 (IL-1R-1) (IL-1RT-1) (IL-1RT1) (EC 3.2.2.6) (CD121 antigen-like family member A) (Interleukin-1 receptor alpha) (IL-1R-alpha) (Interleukin-1 receptor type I) (p80) (CD antigen CD121a) [Cleaved into: Interleukin-1 receptor type 1, membrane form (mIL-1R1) (mIL-1RI); Interleukin-1 receptor type 1, soluble form (sIL-1R1) (sIL-1RI)]

Synonym: Il1r1, Il-1r1, Il1ra

UniProt ID: P13504

UniProt Link: www.uniprot.org/uniprotkb/P13504/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 576 AA

Molecular Weight: 67 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MENMKVLLGLICLMVPLLSLEIDVCTEYPNQIVLFLSVNEIDIRKCPLTPNKMHGDTIIWYKNDKSTPIS
ADRDSRIHQQNEHLWFVPAKVEDSGYCYCIVRNSTYCLKTKVTVTVLENDPGLCYSTQATFPQRLHI
AGDGSLVCPYVSFYKDENNELPEVQWYKNCKPLLLDNVSFFGVKDKLLVRNVAEEHREGDYICRMSY
TFRGKQYPVTRVIQFITIDENKRDRPVILSPRNETIEADPGSMIQLICNVTGQFSDLVYWKWNGSEIEW
NDPFLAEDYQFVEHPSTKRKYTLITLNISEVKSQFYRYPFICVVKNTNIFESAHVQLIYPVPDFKNYLI
GGFIILTATIVCCVCYKVKVDIVLWYRDSCSGFLPSKASDGKTYDAYILYPKTLGEGSFSDLDTFVFK
LLPEVLEGQFGYKLFYGRDDYVGEDTIEVTNENVKKSRRLLIILVRDMGGFSWLGQSSEEQIAIYNALI
QEGIKIVLLELEKIQDYEKMPDSIQFIKQKHGVICWSGDFQERPQSAKTRFWKNLRYQMPAQRRSPL
SKHRLTLDPVRDTEKELPAATHLPLG

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 type 1 (IL-1R-1) (IL-1RT-1) (IL-1RT1) (EC 3.2.2.6) (CD121 antigen-like family member A) (Interleukin-1 receptor alpha) (IL-1R-alpha) (Interleukin-1 receptor type I) (p80) (CD antigen CD121a) [Cleaved into: Interleukin-1 receptor type 1, membrane form (mIL-1R1) (mIL-1RI); Interleukin-1 receptor type 1, soluble form (sIL-1R1) (sIL-1RI)] 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: Receptor for IL1A, IL1B and IL1RN. After binding to interleukin-1 associates with the coreceptor IL1RAP to form the high affinity interleukin-1 receptor complex which mediates interleukin-1-dependent activation of NF-kappa-B, MAPK 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. Binds ligands with comparable affinity and binding of antagonist IL1RN prevents association with IL1RAP to form a signaling complex. Involved in IL1B-mediated costimulation of IFNG production from T-helper 1 (Th1) cells (By similarity).; [Isoform 2]: Unable to mediate canonical IL-1 signaling. Cooperates with IL1RAP isoform 3 to mediate IL1B-induced neuronal activity including IL1B-potentiated NMDA-induced calcium influx mediated by Akt kinase activation.

Subcellular Localization: Membrane; Single-pass type I membrane protein. Cell membrane . 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.