

Recombinant Mouse ILRL1 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51276

Size: 10ug, 100ug

Protein Name: Interleukin-1 receptor-like 1 (EC 3.2.2.6) (Interleukin-33 receptor alpha chain) (Lymphocyte antigen 84) (Protein ST2) (Protein T1)

Synonym: Il1rl1, Ly84, St2, Ste2

UniProt ID: P14719

UniProt Link: www.uniprot.org/uniprotkb/P14719/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 567 AA

Molecular Weight: 65 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MIDRQRMGLWALAILTLPMYLTVTEGSKSSWGLENEALIVRCPQRGRSTYPVEWYYSDTNESIPTQK
RNRIFVSRDRLKFLPARVEDSGIYACVIRSPNLNKTGYLNVTHHKKPPSCNIPDYLMYSTVRGSDKNFK
ITCPTIDLWNWTAPVQWFKNCKALQEPRFRAHRSYLFIDNVTHDDEGDYTCQFTHAENGNTNYIVTAT
RSFTVEEKGFMSFPVITNPPYNHTMEVEIGKPASIACSACFGKGSFLADVLWQINKTVVGNFGEARI
QEEEGRNESSSNDMDCLTSVLRITGVTEKDLSLEYDCLALNLHGMIRHTIRLRKQPIDHRSIYYIVAG
CSLLLMFINVLVIVLKVFVWIEVALFWRDIVTPYKTRNDGKLYDAYIIYPRVFRGSAAGTHSVEYFVHHTL
PDVLENKCGYKLCIYGRDLLPGQDAATVVESSIQNSRRQVFLAPHMMHSKEFAYEQEIALHSALIQ
NNSKVILIEMEPLGEASRLQVGDLQDSLQHLVKIQGTIKWREDHVADKQSLSSKFWKHVRYQMPVPE
RASKTASVAAPLSGKACLDLKH

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-like 1 (EC 3.2.2.6) (Interleukin-33 receptor alpha chain) (Lymphocyte antigen 84) (Protein ST2) (Protein T1) 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 interleukin-33 (IL-33) which plays crucial roles in innate and adaptive immunity, contributing to tissue homeostasis and responses to environmental stresses together with coreceptor IL1RAP (PubMed:17675517, PubMed:18450470, PubMed:22660580, PubMed:29045903). Its stimulation recruits MYD88, IRAK1, IRAK4, and TRAF6, followed by phosphorylation of MAPK3/ERK1 and/or MAPK1/ERK2, MAPK14, and MAPK8 (By similarity). Possibly involved in helper T-cell function (By similarity). Upon tissue injury, induces UCP2-dependent mitochondrial rewiring that attenuates the generation of reactive oxygen species and preserves the integrity of Krebs cycle required for persistent production of itaconate and subsequent GATA3-dependent differentiation of inflammation-resolving alternatively activated macrophages (PubMed:34644537).; [Isoform B]: Inhibits IL-33 signaling.

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