

Recombinant Mouse I17RA Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51629

Size: 10ug, 100ug

Protein Name: Interleukin-17 receptor A (IL-17 receptor A) (IL-17RA) (CD antigen CD217)

Synonym: Il17ra, Il17r

UniProt ID: Q60943

UniProt Link: www.uniprot.org/uniprotkb/Q60943/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 864 AA

Molecular Weight: 98 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAIRRCWPRVVP GPALGWLLLLLNVLAPGRASPRLLDFPAPVCAQEGLSCRVKNSTCLDDSWIHPK
NLTPSSPKNIYINLSVSSTQHGELVPVLHVEWTLQTDASILYLEGAELSVLQLNTNERLCVKFQFLSML
QHHRKRWRFSFSHFVVDPGQEYEVTVHHLPKPIPDGDPNHKSKII FVPDCEDSKMKMTTSCVSSGS
LWDPNITVETLDTQHRLRVDFTLWNESTPYQVLLESFSDSENHSCFDVVKQIFAPRQEEFHQRANVTF
TLSKFHWCCHHHVQVQPPFFSSCLNDCLRHA VTVPCPVISNTTVPKPVADYIPLWVYGLITLAILLVGS
VIVLIICMTWRLSGADQEKHGDDSKINGILPVADLT PPPLRPRKVVIVYSADHPLYVEVVLKFAQFLITA
CGTEVALDLL EEQVISEVGVMTWVSRQKQEMVESNSKIIILCSRGTQAKWKAILGWAEPVQLRCDH
WK PAGDLFTAAMNMILPDFKRPACFGTYVVCYFSGICSERDVPDLFNITSRYPLMDRFE EVYFRIQDL
EMFEPGRMHVREL TGDNYLQSPSGRQLKEAVLRFQEWQTQCPDWFERENLCLADGQDLPSLDE
EVFEDPLLPPGGGIVKQQPLVRELPSDGCLVVDVCVSEEE SRMAKLDPQLWPQRELVAHTLQSMVL
PAEQVPAAHVVEPLHLPDGSGAAQLPMTEDSEACPLLGVQRNSILCLPVDSDDLPLCSTPM MSPD
HLQGDAREQLESLMLSVLQQSLSGQPLESWPRPEVVLEGCTPSEEEQRQSVQSDQGYISRSSPQP
PEWLTEEELELGE PVESLSPEELRSLRKLQRQLFFWELEKNPGWNSLEPRRPTPEEQNPS

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-17 receptor A (IL-17 receptor A) (IL-17RA) (CD antigen CD217) 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 IL17A and IL17F, major effector cytokines of innate and adaptive immune system involved in antimicrobial host defense and maintenance of tissue integrity. Receptor for IL17A (PubMed:17911633, PubMed:20554964, PubMed:27923703, PubMed:8777726). Receptor for IL17F (PubMed:17911633, PubMed:20554964). Binds to IL17A with higher affinity than to IL17F (PubMed:17911633). Binds IL17A and IL17F homodimers as part of a heterodimeric complex with IL17RC (By similarity). Also binds heterodimers formed by IL17A and IL17F as part of a heterodimeric complex with IL17RC (By similarity). Cytokine binding triggers homotypic interaction of IL17RA and IL17RC chains with TRAF3IP2 adapter, leading to TRAF6-mediated activation of NF-kappa-B and MAPkinase pathways, ultimately resulting in transcriptional activation of cytokines, chemokines, antimicrobial peptides and matrix metalloproteinases, with potential strong immune inflammation (By similarity). Involved in antimicrobial host defense primarily promoting neutrophil activation and recruitment at infection sites to destroy extracellular bacteria and fungi (PubMed:20364087, PubMed:21993848). In secondary lymphoid organs, contributes to germinal center formation by regulating the chemotactic response of B cells to CXCL12 and CXCL13, enhancing retention of B cells within the germinal centers, B cell somatic hypermutation rate and selection toward plasma cells (PubMed:18157131). Plays a role in the maintenance of the integrity of epithelial barriers during homeostasis and pathogen infection. Stimulates the production of antimicrobial beta-defensins DEFB1, DEFB103A, and DEFB104A by mucosal epithelial cells, limiting the entry of microbes through the epithelial barriers (PubMed:19144317). Involved in antiviral host defense through various mechanisms. Enhances immunity against West Nile virus by promoting T cell cytotoxicity (PubMed:27795421). Contributes to influenza A virus (H1N1) clearance by driving the differentiation of B-1a B cells, providing for production of virus-specific IgM antibodies at first line of host defense (PubMed:26735852). Receptor for IL17C as part of a heterodimeric complex with IL17RE (PubMed:21982598, PubMed:21993848, PubMed:21993849).; (Microbial infection) Receptor for SARS coronavirus-2/SARS-CoV-2 virus protein ORF8, leading to IL17 pathway activation and an increased secretion of pro-inflammatory factors through activating NF-kappa-B signaling pathway.

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

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.