

Recombinant Mouse I17RC Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51787

Size: 10ug, 100ug

Protein Name: Interleukin-17 receptor C (IL-17 receptor C) (IL-17RC) (Interleukin-17 receptor-like protein) (IL-17RL) (ZcytoR14)

Synonym: Il17rc

UniProt ID: Q8K4C2

UniProt Link: www.uniprot.org/uniprotkb/Q8K4C2/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 698 AA

Molecular Weight: 77 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MPVSWFLLSLALGRNPVVVSLERLMEPQDTARCSLGLSCHLWDGDVLCPLPGSLQSAPGPVLVPTRL
QTELVLRCPQKTDALCVRVVHLAVHGHWAEPPEEAGKSDSELQESRNASLQAQVLSFQAYPIAR
CALLEVQVPADLVQPGQSVGSAVFDCFEASLGAEVQIWSYTKPRYQKELNLTQQLPDCRGLEVRDS
IQSCWVLPWLVNSTDGDNVLLTLDVSEEQDFSFLLYLRPVPDALKSLWYKNLTGPQNITLNHTDLVP
CLCIQVWSLEPDSEVEFCPFREDPGAHRNLWHIARLRLVSPGVWQLDAPCCLPGKVTLCWQAPD
QSPCQPLVPPVPQKNATVNEPQDFQLVAGHPNLCVQVSTWEKVQLQACLWADSLGPFKDDMLLVE
MKTGLNNTSVCALEPSGCTPLPSMASTRAARLGEELLQDFRSHQCMQLWNDDNMGSLWACPMDB
YIHRRWVLVWLACLLLAALFFLLKKDRRKAARGSRATLLHSADGAGYERLVGALASALSQMPL
RVAVDLWSRRELSAHGALAWFHHQRRRLQEGGVILLFSPAAVAQCQQWLQLQTVEPGPHDALA
AWLSCVLPDFLQGRATGRYVGVYFDGLLHPDSVPSFPRVAPLFSLPSQLPAFLDALQGGCSTSAGR
PADRVERVTQALRSALDCTSSSEAPGCCEEWDLGPCTTLE

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 C (IL-17 receptor C) (IL-17RC) (Interleukin-17 receptor-like protein) (IL-17RL) (ZcytoR14) 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 (PubMed:19144317, PubMed:27923703). Receptor for IL17A and IL17F homodimers as part of a heterodimeric complex with IL17RA (PubMed:17911633, PubMed:20554964). Receptor for the heterodimer formed by IL17A and IL17B as part of a heterodimeric complex with IL17RA (By similarity). Has also been shown to be the cognate receptor for IL17F and to bind IL17A with high affinity without the need for IL17RA (By similarity). Upon binding of IL17F homodimer triggers downstream activation of TRAF6 and NF-kappa-B signaling pathway (PubMed:28813677). Induces transcriptional activation of IL33, a potent cytokine that stimulates group 2 innate lymphoid cells and adaptive T-helper 2 cells involved in pulmonary allergic response to fungi (PubMed:28813677). Promotes sympathetic innervation of peripheral organs by coordinating the communication between gamma-delta T cells and parenchymal cells. Stimulates sympathetic innervation of thermogenic adipose tissue by driving TGFB1 expression (PubMed:32076265). Binding of IL17A-IL17F to IL17RA-IL17RC heterodimeric receptor complex triggers homotypic interaction of IL17RA and IL17RC chains with TRAF3IP2 adapter through SEFIR domains. This leads to downstream 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 (PubMed:20554964). Primarily induces neutrophil activation and recruitment at infection and inflammatory sites (PubMed:27923703). 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).

Subcellular Localization: [Isoform 1]: Cell membrane ; Single-pass type I membrane protein . ; [Isoform 2]: Cell membrane ; Single-pass type I membrane protein . ; [Isoform 3]: Cell membrane ; Single-pass type I membrane protein . ; [Isoform 4]: 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.