

# Recombinant Human IL3RB Protein

**For Research Use Only**

## 1. Basic Product Information

Catalog No.: REP50534

Size: 10ug, 100ug

Protein Name: Cytokine receptor common subunit beta (CDw131) (GM-CSF/IL-3/IL-5 receptor common beta subunit) (CD antigen CD131)

Synonym: CSF2RB, IL3RB, IL5RB

UniProt ID: P32927

UniProt Link: [www.uniprot.org/uniprotkb/P32927/entry](http://www.uniprot.org/uniprotkb/P32927/entry)

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 897 AA

Molecular Weight: 97 KD

Protein Tag: C-terminal His6

## 2. Amino Acid Sequence

MVLAQGLLSMALLALCWERSLAGAEETIPLQTLRCYNDYTSHITCRWADTQDAQRLVNVTLIRRVNE  
DLLEPVSCDLSDDMPWSACPHPRCVPRRCVIPCQSFVVTDDYFSFQPDRLGTRTLTVTLTQHVQP  
PEPRDLQISTDQDHFLTWSVALGSPQSHWLSPGDLEFEVVYKRLQDSWEDAAILLSNTSQATLGPE  
HLMPSSSTYVARVRTRLAPGSRLSGRPSKWSPEVCWDSQPGDEAQPQNLECFDGA AVLSCSWEV  
RKEVASSVSFGLFYKPSPDAGEEECSVLREGLGSLHTRHHCQIPVPDPATHGQYIVSVQPRRAEK  
HIKSSVNIQMAPP SLNVT KDGSYSLRWETMKMRYEHIDHTFEIQYRKDTATWKDSKTETLQNAHSM  
ALPALEPSTRYWARVRVRTSRTGYNGIWSEWSEARSWDTESVLPMWVLALIVIFLTIAVLLALRFCGI  
YGYRLRRK WEEKIPNPSKSHLFQNGSAELWPPGSMASFTSGSPPHQGPWGS RFPELEGVFPVGF  
GDSEVSPLTIEDPKHVCDDPPSGPDTPAASDLPT EQPPSPQGP PAASHTPEKQASSFD FNGPYLG  
PPHSRSLPDILGQPEPPQEGGSQKSPPPGSLEYLCLPAGGQVQLVPLAQAMGPGQAVEVERRPSQ  
GAAGSPSLES GGGPAPPALGPRVGGQDQKDSPVAIPMSSGDTEDPGVASGYVSSADLVFTPN SGA  
SSVSLVPSLGLPSDQTPSLCPGLASGPPGAPGPVKSGFEGYVELPPIEGRSPRSPRNNPVPPEAKS  
PVLNPGERPADVSPTSPQPEGLLVLQQVG DYCF L PGLGPGPLSLRSKPSSPGPGPEIKNLDQAFQV  
KKPPGQAVPQVPVIQLFKALKQQDYLSLPPWEVNKPG EVC

## 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 Cytokine receptor common subunit beta (CDw131) (GM-CSF/IL-3/IL-5 receptor common beta subunit) (CD antigen CD131) 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:** Cell surface receptor that plays a role in immune response and controls the production and differentiation of hematopoietic progenitor cells into lineage-restricted cells. Acts by forming an heterodimeric receptor through interaction with different partners such as IL3RA, IL5RA or CSF2RA (PubMed:1495999). In turn, participates in various signaling pathways including interleukin-3, interleukin-5 and granulocyte-macrophage colony-stimulating factor/CSF2 pathways. In unstimulated conditions, interacts constitutively with JAK1 and ligand binding leads to JAK1 stimulation and subsequent activation of the JAK-STAT pathway (PubMed:9516124).

**Subcellular Localization:** 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.