Recombinant IL3RB protein (His tag)

Catalog Number	542272
Synonyms	CDw131; GM-CSF/IL-3/IL-5 receptor common beta subunit; CD antigen CD131
Species	Human
Expression System	E. coli
Accession	P32927
Molecular Weight	Predictes a molecular mass of 50.35 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 52 kDa band.

Product Information

Sequence Region	17-443
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 17-443 aa (P32927) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Cytokine Receptor Common Subunit Beta (CD131) Fragment (aa 17-443) - A high-purity protein fragment encompassing the complete Fibronectin type-III domains 1 and 2, designed for studying cytokine receptor signaling and hematopoietic cell differentiation mechanisms. The full-length Cytokine Receptor Common Subunit Beta (CSF2RB) is a critical cell surface receptor that plays essential roles in immune response and controls the production and differentiation of hematopoietic progenitor cells into lineage-restricted cells. This single-pass type I membrane protein functions by forming heterodimeric receptors through interaction with different partners including IL3RA, IL5RA, or CSF2RA. It participates in multiple signaling pathways including interleukin-3, interleukin-5, and granulocyte-macrophage colony-stimulating factor pathways. In unstimulated conditions, it constitutively interacts with JAK1, and ligand binding leads to JAK1 stimulation and subsequent activation of the JAK-STAT signaling cascade, making it a key regulator of hematopoietic development and immune function.