

# Recombinant Human I12R1 Protein

**For Research Use Only**

## 1. Basic Product Information

Catalog No.: REP50423

Size: 10ug, 100ug

Protein Name: Interleukin-12 receptor subunit beta-1 (IL-12 receptor subunit beta-1) (IL-12R subunit beta-1) (IL-12R-beta-1) (IL-12RB1) (IL-12 receptor beta component) (CD antigen CD212)

Synonym: IL12RB1, IL12R, IL12RB

UniProt ID: P42701

UniProt Link: [www.uniprot.org/uniprotkb/P42701/entry](http://www.uniprot.org/uniprotkb/P42701/entry)

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 662 AA

Molecular Weight: 73 KD

Protein Tag: C-terminal His6

## 2. Amino Acid Sequence

MEPLVTWVPLLFLFLLSRQGAACRTSECCFQDPYPDADSGSASGPRDLRCYRISSDRYECSWQ  
YEGPTAGVSHFLRCCLSSGRCCYFAAGSATRLQFSDQAGVSVLYTVTLWVESWARNQTEKSPEVT  
LQLNSVKYEPPLGDIKVS LAGQLRMEWETPDNQVGAEVQFRHRTSPSPWKLGDGCPQDDDTES  
CLCPLMNVAQEFQLRRRQLGSQGSSWSKWSSPVCVPPENPPQPQVRF SVEQLGQDGRRRLTLK  
EQPTQLELPEGCQGLAPGTEVTYRLQLHMLSCPC KAKATRTLHLGKMPYLSGAAYNVAVISSNQFG  
PGLNQ TWHIPADTHTEPVALNISVG TNGTTMYWPARAQSM TYCIEWQPVGQDGLATCSLTAPQD  
PDPAGMATYSWSRESGAMGQEKCYITIFASAHPEKLT LWSTVLSTYHFGGNASAAGTPHHVSVKN  
HSLDSVSDWAPSLSTCPGVLKEYVVR CRDEDSKQVSEHPVQPTETQVTL SGLRAGVAYTVQVRA  
DTAWLRGVWSQPQRFSIEVQVSDWLIFFASLG SFLSILLVGV LGYLGLNRAARHLC PPLPTPCASSAI  
EFPGGKETWQWINPVDFQEEASLQEALV VEMSWDKGERTEPLEKTELPEGAPELALDTELSLEDGD  
RCKAKM

## 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-12 receptor subunit beta-1 (IL-12 receptor subunit beta-1) (IL-12R subunit beta-1) (IL-12R-beta-1) (IL-12RB1) (IL-12 receptor beta component) (CD antigen CD212) 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:** Functions as an interleukin receptor which binds interleukin-12 with low affinity and is involved in IL12 transduction. Associated with IL12RB2 it forms a functional, high affinity receptor for IL12. Also associates with IL23R to form the interleukin-23 receptor which functions in IL23 signal transduction probably through activation of the Jak-Stat signaling cascade.

**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.