



Recombinant Protein Technical Manual

Recombinant Human IL12RB1 Protein (His Tag)(Active)
RPES0328

Product Data:

Product SKU: RPES0328

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_005526.1

Protein Information:

Molecular Mass: 58.5 kDa

AP Molecular Mass:

Tag: C-His

Bio-activity: Measured by its binding ability in a functional ELISA. Immobilized human IL12RB1 at 20 µg/ml (100 µl/well) can bind human IL12B with a linear ranger of 2.56-64 ng/ml.

Purity: > 94 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: CD212;IL2R-BETA1;IL12RB;IMD30; CD212 antigen; IL2 receptor beta component; IL2 receptor subunit beta; IL12R; IL2R subunit beta; IL12RB; IL2RB1; IL2R-BETA1; IL2R-beta; interleukin2 receptor beta chain; interleukin2 receptor subunit beta

Immunogen Information:

Sequence: Met 1-Glu 540

Background:

Interleukin 12 receptor, beta 1 is also known as IL2 receptor beta component, IL2R subunit beta, and CD212 antigen (CD212). IL12RB1(CD212) is a subunit of the interleukin 12 receptor. IL12RB1(CD212) is a type I transmembrane protein that belongs to the hemopoietin receptor superfamily. This protein binds to interleukine 12 (IL12) with a low affinity, and is thought to be a part of IL12 receptor complex. IL12RB1(CD212) forms a disulfide-linked oligomer, which is required for its IL12 binding activity. The coexpression of IL12RB1 and IL12RB2 proteins was shown to lead to the formation of high-affinity IL12 binding sites and reconstitution of IL12 dependent signaling. The lack of expression of this gene was found to result in the immunodeficiency of patients with severe mycobacterial and Salmonella infections. IL12RB1(CD212) Functions as an interleukin receptor which binds interleukin2 with low affinity and is involved in IL12 transduction. It associated with IL12RB2 it forms a functional, high affinity receptor for IL12. IL12RB1(CD212) associates also with IL23R to form the interleukin-23 receptor which functions in IL23 signal transduction probably through activation of the Jak-Stat signaling cascade.