



Recombinant Protein Technical Manual

Recombinant Mouse IL12RB2/IL12R-beta 2 Protein (His Tag)(Active) RPES3806

Product Data:

Product SKU: RPES3806

Size: 50µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: NP_032380.1

Protein Information:

Molecular Mass: 70 kDa

AP Molecular Mass: 12030 kDa

Tag: C-His

Bio-activity: Measured by its ability to bind Mouse IL12A & IL12B Heterodimer Protein in a functional ELISA. Immobilized mouse IL12RB2-His at 10 µg/ml (100 µl/well) can bind Mouse IL12A & IL12B Heterodimer Protein. The EC50 of Mouse IL12A & IL12B Heterodimer Protein is

Purity: > 97 % as determined by 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: IL12RB2; IL2 receptor beta 2; IL2 receptor subunit beta-2; IL2R subunit beta-2; IL2RB2; IL2R-beta-2; interleukin2 receptor beta-2 chain; interleukin2 receptor subunit beta-2

Immunogen Information:

Sequence: Met 1-Asn 637

Background:

Interleukin2 receptor subunit beta-2 (IL12RB2), also known as IL2 receptor subunit beta-2, IL2R subunit beta-2, IL2R-beta-2, and IL2RB2, is a type I transmembrane protein identified as a subunit of the interleukin 12 receptor complex. IL12RB2 belongs to the type I cytokine receptor family. The coexpression of IL12RB2 and IL12RB1 proteins was shown to lead to the formation of high-affinity IL12 binding sites and reconstitution of IL12 dependent signaling. The expression of IL12RB2 is up-regulated by IFN gamma in Th1 cells, and plays a role in Th1 cell differentiation. The up-regulation of IL12RB2 is found to be associated with a number of infectious diseases, such as Crohn's disease and leprosy, which is thought to contribute to the inflammatory response and host defense. This subunit is the signaling component coupling to the JAK2/STAT4 pathway. IL12RB2 promotes the proliferation of T-cells as well as NK cells. IL12RB2 induces the promotion of T-cells towards the Th1 phenotype by strongly enhancing IFN-gamma production.