

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

Catalog No. PKSM040866

Note: Centrifuge before opening to ensure complete recovery of vial contents.

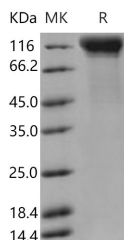
Description

Synonyms	IL12RB2;IL-12 receptor beta 2;IL-12 receptor subunit beta-2;IL-12R subunit beta-2;IL-12RB2;IL-12R-beta-2;interleukin-12 receptor beta-2 chain;interleukin-12 receptor subunit beta-2
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Met 1-Asn 637
Accession	NP_032380.1
Calculated Molecular Weight	70.0 kDa
Observed molecular weight	120-130 kDa
Tag	C-His
Bioactivity	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 50.2-117.2 ng/ml.

Properties

Purity	> 97 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, 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 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 97 % as determined by reducing SDS-PAGE.

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Background

Interleukin-12 receptor subunit beta-2 (IL12RB2), also known as IL-12 receptor subunit beta-2, IL-12R subunit beta-2, IL-12R-beta-2, and IL-12RB2, 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.

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