

Recombinant Human IL12RB1 Protein (His Tag)

Catalog No. PKSH031032

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

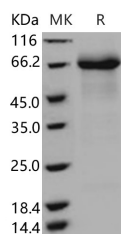
Description

Synonyms	CD212;IL-12R-BETA1;IL12RB;IMD30;CD212 antigen;IL-12 receptor beta component;IL-12 receptor subunit beta-1;IL12R;IL-12R subunit beta-1;IL12RB;IL-12RB1;IL-12R-BETA1;IL-12R-beta-1;interleukin-12 receptor beta-1 chain;interleukin-12 receptor subunit beta-1
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Glu 540
Accession	NP_005526.1
Calculated Molecular Weight	58.5 kDa
Tag	C-His
Bioactivity	Immobilized human IL12RB1 at 20 µg/ml (100 µl/well) can bind human IL12B with a linear ranger of 2. 56-64 ng/ml.

Properties

Purity	> 94 % 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



> 94 % as determined by reducing SDS-PAGE.

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Background

Interleukin 12 receptor; beta 1 is also known as IL-12 receptor beta component; IL-12R subunit beta-1; 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 interleukin-12 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.

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