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

Catalog Number: PKSM041052

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

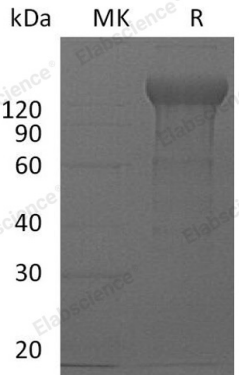
Description

Species	Mouse
Source	HEK293 Cells-derived Mouse IL12RB2/IL12R-beta 2 protein Met1-Asn637, with an C-terminal Fc
Calculated MW	98.4 kDa
Observed MW	125-160 kDa
Accession	P97378
Bio-activity	Not validated for activity

Properties

Purity	> 95 % 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 a 0.2 μm filtered solution of PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 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



> 95 % as determined by reducing SDS-PAGE.

Background

The IL12 receptor complex, formed by IL12RB1 and IL12RB2, mediates the type I immune responses of various types of lymphocytes. Its ligand, IL12, is a heterodimeric cytokine composed of IL-12p35 and IL-12p40 subunits that are linked via disulfide bonds. Ligation of IL-12 to its receptor involves the binding of IL-12p35 to IL12RB1 and IL-12p40 to IL12RB2. This will result in the activation of tyrosine kinase 2 (TYK2), which is associated with the IL12RB1 chain and Janus kinase 2 (JAK2), which is associated with the IL12RB2 chain. Activated TYK2 and JAK2 direct the phosphorylation of STAT4. IL12RB1 is present on all lymphocytes, while the expression of IL12RB2 is tightly regulate d. It has shown that the expression of IL12RB2 is limited to Th2 cells. IL12RB2 subunit plays an important role in Th1 cell differentiation, since its absence leads to an abortive Th1 differentiation that has dysfunctional production of Th1 effector molecules.

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