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

Catalog Number: PKSM040866

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

Description		
Species	Mouse	
Source	HEK293 Cells-derived Mouse IL12RB2/IL12R-beta protein Met 1-Asn 637, with a	
	terminal His	
Calculated MW	70.0 kDa	
Observed MW	120-130 kDa	
Accession	NP_032380.1	
Bio-activity	Measured by its ability to bind Mouse IL12A &IL12B Heterodimer Protein in a	
	functional ELISA. Immobilized mouse IL12RB2-His at 10 μ g/ml (100 μ l/well) can	
	bind Mouse IL12A &IL12B Heterodimer Protein. The EC_{50} 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	
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of	
	reconstituted samples are stable at $< -20^{\circ}C$ 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% 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

KDa	MK	R
116 66.2	-	-
45.0	-	
35.0	-	
25.0	-	
18.4	-	
14.4	-	

> 97 % as determined by reducing SDS-PAGE.

Background

Elabscience®

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 comple x 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.