Recombinant Human CD122/IL-2RB Protein

Catalog No. PKSH031478

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

Description			
Synonyms	CD122;IL15RB;P70-75		
Species	Human		
Expression Host	HEK293 Cells		
Sequence	Met 1-Asp 239		
Accession	NP_000869.1		
Calculated Molecular Weight	25.2 kDa		
Observed molecular weight	40 kDa		
Tag	None		
Bioactivity	 Immobilized human IL2Rb at 10 μg/ml (100 μl/well) can bind biotinylated human IL2, The EC50 of biotinylated human IL2 is 0.1-0.24 μg/mL. Measured by its ability to inhibit IL15-dependent proliferation of MO7e human megakaryocytic leukemic cells in the presence of 4.0 ng/mL of recombinant human IL-15.The ED50 for this effect is 1-4μg/mL. 		
Properties			
Purity	> 90 % as determined by reducing SDS-PAGE.		
Endotoxin	< 1.0 EU per μ g 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 100mM NaCl, 50mM Tris, pH 7.5 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			

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

> 90 % as determined by reducing SDS-PAGE.

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Background

Interleukin-2 receptor (IL-2R) also known as High affinity IL-2 receptor subunit beta, IL-2 receptor subunit beta, and IL-2RB, is involved in T cell-mediated immune responses. CD122/IL-2RB is present in 3 forms with respect to ability to bind interleukin 2. The low affinity form is a monomer of the alpha subunit and is not involved in signal transduction. The intermediate affinity form consists of an alpha/beta subunit heterodimer, while the high affinity form consists of an alpha/beta/gamma subunit heterotrimer. Both the intermediate and high affinity forms of CD122/IL-2RB are involved in receptor-mediated endocytosis and transduction of mitogenic signals from interleukin 2. CD122/IL-2RB expression was restricted to the earliest B220+ cells (CD43+CD24-; prepro B cells; fraction A) that proliferate vigorously to IL-2 in the absence of any stromal cells, but not to IL-15. The high-affinity form of this receptor is expressed on activated T lymphocytes, activated B lymphocytes, and activated macrophages. CD122/IL-2RB plays a role in regulating normal lymphocyte development.

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