## Recombinant Human KLRB1/CD161 Protein (Fc Tag)

Catalog Number: PKSH032676



Description			
Species	Human		
Mol_Mass	45.6 kDa		
Accession	Q12918		
<b>Bio-activity</b>	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 $< -20^{\circ}$ 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.		

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

kDa 120 90 60	MK	R
40		•
30	-	•
20	-	•
14		

> 95 % as determined by reducing SDS-PAGE.

## Background

Data

Killer cell lectin-like receptor subfamily B, member 1(KLRB1) is a single-pass type II membrane protein which contains 1 C-type lectin domain. KLRB1 plays an inhibitory role on natural killer (NK) cells cytotoxicity. Activation results in specific acid sphingomyelinase/SMPD1 stimulation with subsequent marked elevation of intracellular ceramide. Activation also leads to AKT1/PKB and RPS6KA1/RSK1 kinases stimulation as well as markedly enhanced T-cell proliferation induced by anti-CD3. It acts as a lectin that binds to the terminal carbohydrate Gal-alpha(1,3)Gal epitope as well as to the N-acetyllactosamine epitope. Binds also to CLEC2D/LLT1 as a ligand and inhibits NK cell-mediated cytotoxicity as well as interferon-gamma secretion in target cells.

## For Research Use Only