

Recombinant Human KLRB1/CD161 Protein (Fc Tag)

Catalog No. PKSH032676

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

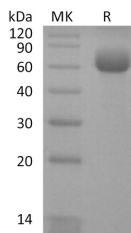
Description

Synonyms	Killer cell lectin-like receptor subfamily B member 1;KLRB1;CLEC5B;NKR-P1A;CD161;Natural killer cell surface protein P1A;NKR-P1A;HNKR-P1a;C-type lectin domain family 5 member B;KLRB1
Species	Human
Expression Host	HEK293 Cells
Sequence	Gln67-Ser225
Accession	Q12918
Calculated Molecular Weight	45.6 kDa
Observed molecular weight	55-70 kDa
Tag	C-Fc
Bioactivity	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% 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



> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

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.