

Recombinant Human CD180/RP105/LY64 Protein (His Tag)

Catalog No. PKSH031138

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

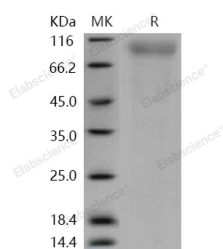
Description

Synonyms	LY64;Ly78;RP105
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Gly 626
Accession	NP_005573.2
Calculated Molecular Weight	69.0 kDa
Observed molecular weight	90-100 kDa
Tag	C-His
Bioactivity	Immobilized human CD180 at 2 µg/ml (100 µl/well) can bind biotinylated mouse MD-1 with a linear ranger of 3. 125-25 µg/ml.

Properties

Purity	> 92 % 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 sterile 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



> 92 % as determined by reducing SDS-PAGE.

Background

The cluster of differentiation (CD) system is commonly used as cell markers in immunophenotyping. Different kinds of

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cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. CD180, also known as RP105, is a B-cell surface molecule belonging to the family of pathogen receptors, Toll-like receptors (TLR). CD180 has an extracellular leucine-rich repeats and a short cytoplasmic tail. CD180 / RP105 interact with an extracellular molecule named MD1 and then together form the cell surface receptor complex RP105 / MD1 which induces B-cell activation in humans and mice, leading to proliferation and up-regulation of a costimulatory molecule, B7.2 / CD86. CD180 / RP105 also has a role in LPS response because B cells lacking RP105 show hyporesponsiveness to LPS.