

Recombinant Rat CD133/PROM1/Prominin 1 Protein (His Tag)

Catalog No. PKSR030230

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

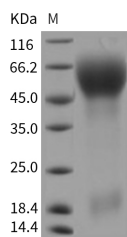
Description

Synonyms	PROM1
Species	Rat
Expression Host	HEK293 Cells
Sequence	Asn171-Tyr424
Accession	F1MAN1
Calculated Molecular Weight	30.9 kDa
Observed molecular weight	47-57 kDa
Tag	N-His
Bioactivity	Not validated for activity

Properties

Purity	> 90 % 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



> 90 % as determined by reducing SDS-PAGE.

Background

CD133, also known as PROM1 and Prominin 1, is a pentaspan transmembrane glycoprotein which belongs to the prominin family. It localizes to membrane protrusions and is often expressed on adult stem cells. CD133 is known to play

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a role in maintaining stem cell properties by suppressing differentiation. CD133 binds cholesterol in cholesterol-containing plasma membrane microdomains. It is proposed to play a role in apical plasma membrane organization of epithelial cells. CD133 is also involved in regulation of MAPK and Akt signaling pathways. Mutations in PROM1 gene have been shown to result in retinitis pigmentosa and Stargardt disease. PROM1 gene is expressed from at least five alternative promoters that are expressed in a tissue-dependent manner. Expression of this gene is also associated with several types of cancer.