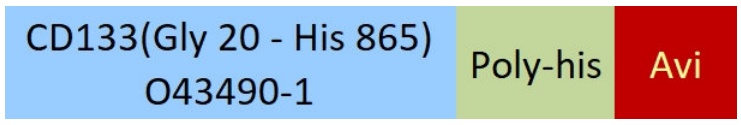
Synonym

CD133,PROM1,PROML1,Prominin-1,AC133

Source

Biotinylated Human CD133 Full Length Protein, His,Avitag™(CD3-H82E5) is expressed from human 293 cells (HEK293). It contains AA Gly 20 - His 865 (Accession # O43490-1).
Predicted N-terminus: Gly 20

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 98.9 kDa.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

This product is not suitable for cell based experiments due to cytotoxicity of DDM.
DDM and CHS are INDISPENSABLE to keep membrane protein soluble and active, under no circumstance should you remove DDM and CHS.
DDM/CHS buffer (DC-11) is sold separately and not included in protein, and please contact us if you need the buffer.
If glycerol is not compatible to your application, remove glycerol just before immediate experiment, and NEVER store glycerol-free protein solution.

Supplied as 0.2 μm filtered solution in 50 mM HEPES, 150 mM NaCl, DDM, CHS, pH7.5 with glycerol as protectant.

Contact us for customized product form or formulation.

Shipping

This product is supplied and shipped with dry ice, please inquire the shipping cost.

Storage

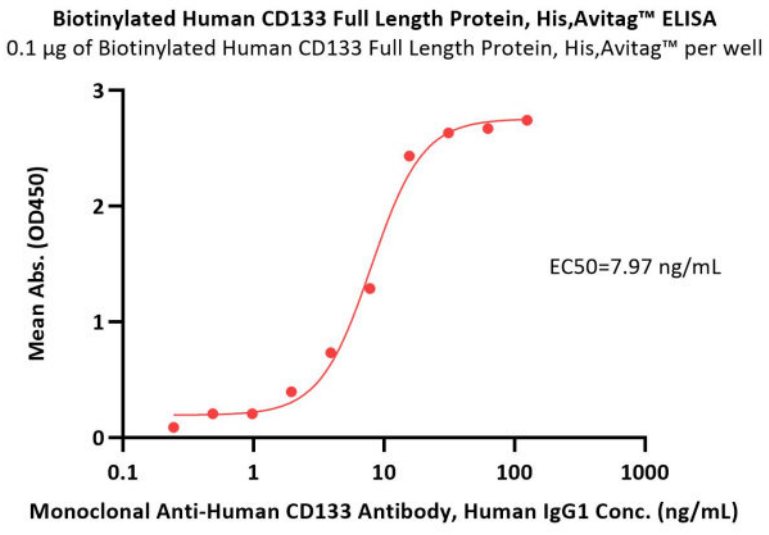
Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

*The DDM/CHS buffer (Cat. No. DC-11) is sold separately and not included in protein, you can follow this link for product information.

Bioactivity-ELISA



Immobilized Biotinylated Human CD133 Full Length Protein, His,Avitag™ (Cat. No. CD3-H82E5) at 1 μg/mL (100 μL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 μg/well) plate can bind Monoclonal Anti-Human

CD133 Antibody, Human IgG1 (Cat. No. CD3-M76) with a linear range of 0.2-16 ng/mL (QC tested).

Background

Prominin-1 is also known as CD133, Antigen AC133, PROM1, PROML1 and MSTP061. Is used as marker for hematopoietic stem and progenitor cells (HSPC) for somatic stem cell isolation. May play a role in cell differentiation, proliferation and apoptosis . Binds cholesterol in cholesterol-containing plasma membrane microdomains and may play a role in the organization of the apical plasma membrane in epithelial cells. During early retinal development acts as a key regulator of disk morphogenesis. Involved in regulation of MAPK and Akt signaling pathways. In neuroblastoma cells suppresses cell differentiation such as neurite outgrowth in a RET-dependent manner.

Clinical and Translational Updates