

**Synonym**

CD133,PROM1,PROML1,Prominin-1,AC133

**Source**

Human CD133, His Tag(CD3-H52H4) is expressed from human 293 cells (HEK293). It contains AA Gly 20 - His 865 (Accession # [O43490-1](#)).

Predicted N-terminus: Gly 20

**Molecular Characterization**

CD133(Gly 20 - His 865)  
O43490-1 Poly-his

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 97.2 kDa. The protein migrates as 90-110 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

&gt;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 as sterile liquid solution with dry ice, please inquire the shipping cost.*

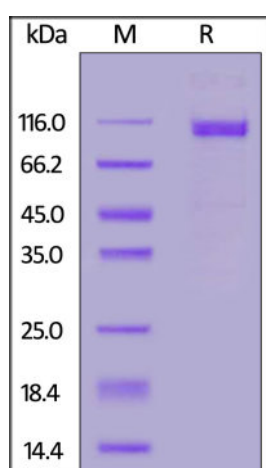
**Storage**

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

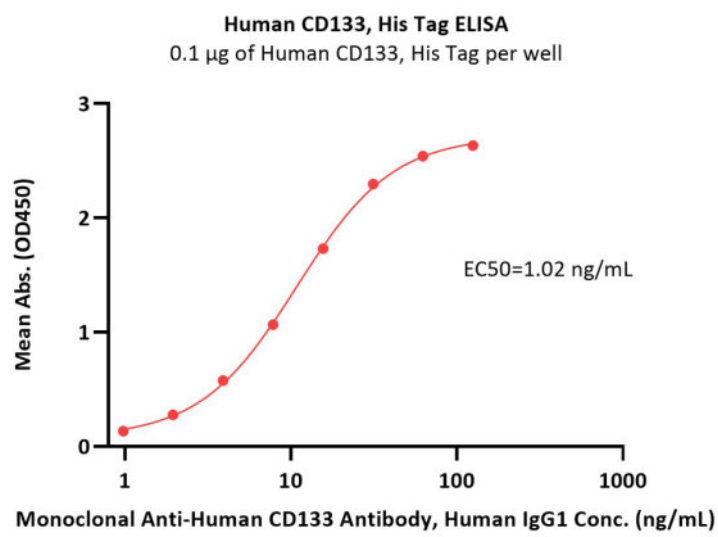
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

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

**SDS-PAGE**

Human CD133, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

**Bioactivity-ELISA**



Immobilized Human CD133, His Tag (Cat. No. CD3-H52H4) at 1 µg/mL (100 µL/well) can bind Monoclonal Anti-Human CD133 Antibody, Human IgG1 with a linear range of 1-16 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

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.