

Synonym

DNAM1,CD226,PTA1

Source

Biotinylated Human DNAM-1, Fc,Avitag(DN1-H82F9) is expressed from human 293 cells (HEK293). It contains AA Glu 19 - Asn 247 (Accession # [NP_006557](#)).

Predicted N-terminus: Glu 19

Molecular Characterization

DNAM-1(Glu 19 - Asn 247) NP_006557	Fc(Pro 100 - Lys 330) P01857	Avi
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This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag™)

The protein has a calculated MW of 54.4 kDa. The protein migrates as 66-100 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

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

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in Tris with Glycine, Arginine and NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

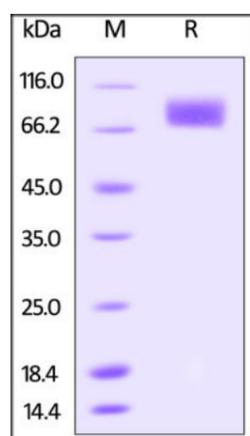
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

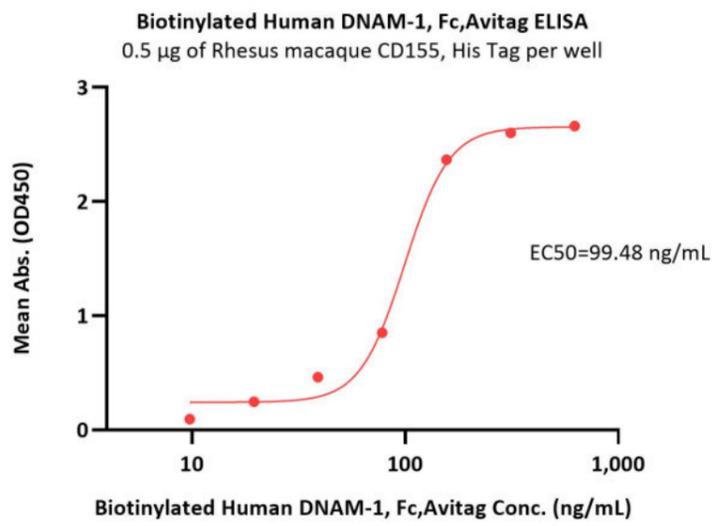
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

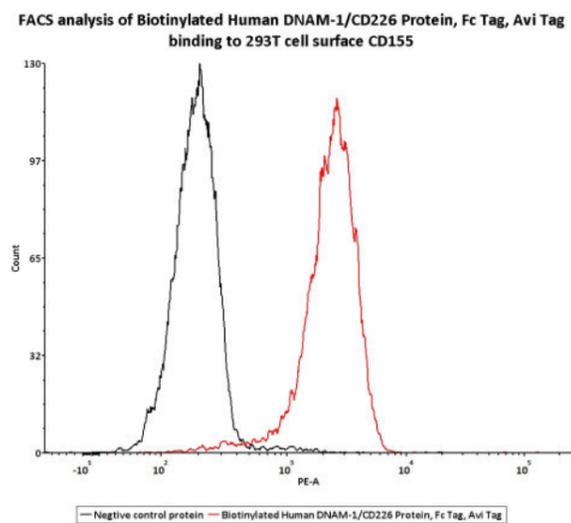
Biotinylated Human DNAM-1, Fc,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Immobilized Rhesus macaque CD155, His Tag (Cat. No. CD5-R52H5) at 5 µg/mL (100 µL/well) can bind Biotinylated Human DNAM-1, Fc,Avitag (Cat. No. DN1-H82F9) with a linear range of 10-156 ng/mL (QC tested).

Bioactivity-FACS



FACS assay shows Biotinylated Human DNAM-1, Fc,Avitag (Cat. No. DN1-H82F9) can bind to 293T cell overexpressing human CD155. The concentration of DNAM-1 is 0.03 µg/mL (Routinely tested).

Background

DX accessory molecule 1 (DM-1), a single-pass type I membrane protein, is also known as CD226 antigen and platelet and T cell activation antigen 1 (PTA1), which contains 2 Ig-like C2-type (immunoglobulin-like) domains. DM-1 is a ~65 kDa glycoprotein expressed on the surface of natural killer cells, platelets, monocytes and a subset of T cells. DM-1 mediates cellular adhesion to other cells bearing its ligands, CD112 and CD155, and cross-linking DM-1 with antibodies causes cellular activation. Furthermore, DM-1 can interact with PVR and PVRL2.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.