

Synonym

DNAM1,CD226,PTA1

Source

Human DNAM-1, Fc Tag(DN1-H5257) 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
---------------------------------------	---------------------------------

This protein carries a human IgG1 Fc tag at the C-terminus

The protein has a calculated MW of 52.6 kDa. The protein migrates as 66-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

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.

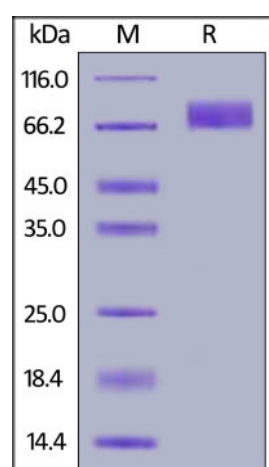
Storage

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

Please avoid repeated freeze-thaw cycles.

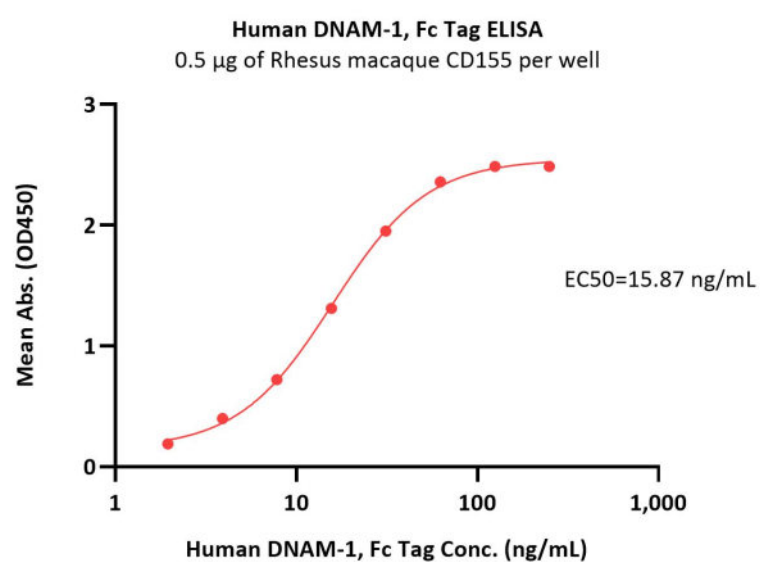
This product is stable after storage at:

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

SDS-PAGE

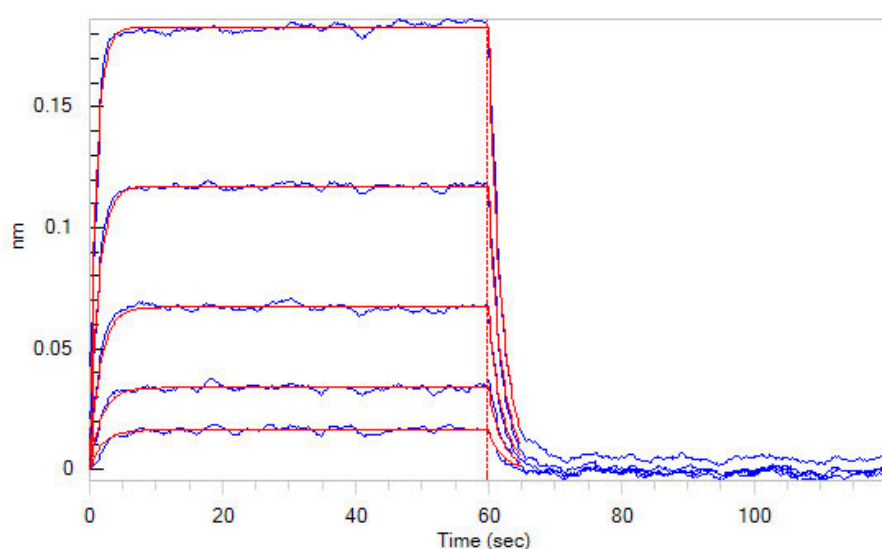
Human DNAM-1, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA

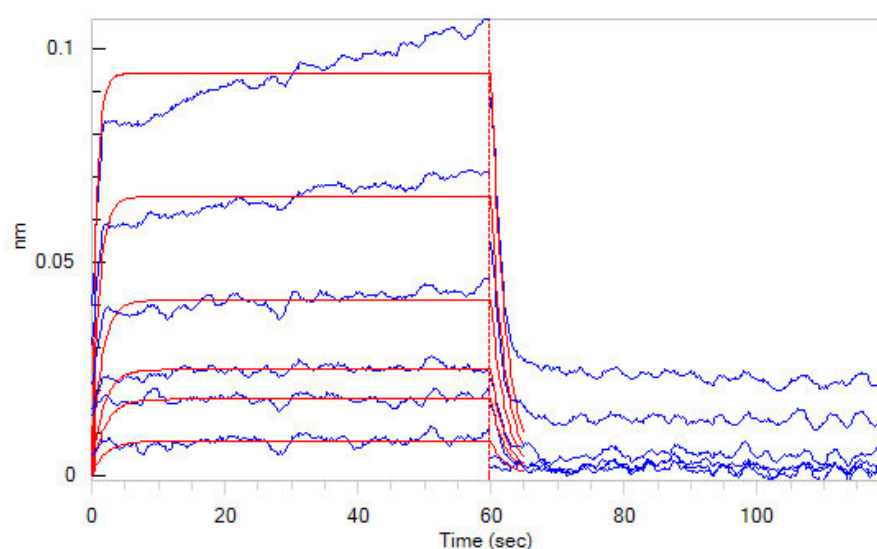


Immobilized Rhesus macaque CD155 (Cat. No. CD5-R52H5) at 5 μ g/mL (100 μ L/well) can bind Human DNAM-1, Fc Tag (Cat. No. DN1-H5257) with a linear range of 2-31 ng/mL (QC tested).

Bioactivity-BLI

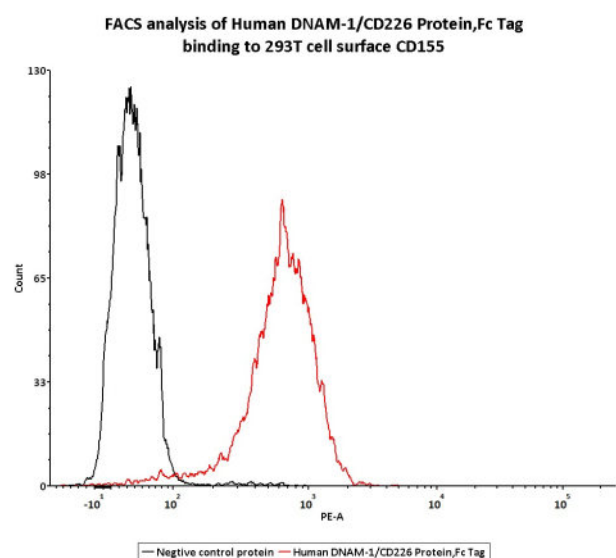


Loaded Human DNAM-1, Fc Tag (Cat. No. DN1-H5257) on Protein A Biosensor, can bind Human CD155, His Tag (Cat. No. CD5-H5223) with an affinity constant of 1.1 μ M as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Human DNAM-1, Fc Tag (Cat. No. DN1-H5257) on Protein A Biosensor, can bind Human Nectin-2, His Tag (Cat. No. PV2-H52E2) with an affinity constant of 0.66 μ M as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Bioactivity-FACS



FACS assay shows that recombinant Human DNAM-1 Protein, Fc Tag (Cat. No. DN1-H5257) can bind to 293T cell overexpressing human CD155. The concentration of DNAM-1 used is 0.03 µg/ml (Routinely tested).

Background

DNAM-1 (DNAM-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. DNAM-1 is a ~65 kDa glycoprotein expressed on the surface of natural killer cells, platelets, monocytes and a subset of T cells. DNAM-1 mediates cellular adhesion to other cells bearing its ligands, CD112 and CD155, and cross-linking DNAM-1 with antibodies causes cellular activation. Furthermore, DNAM-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.