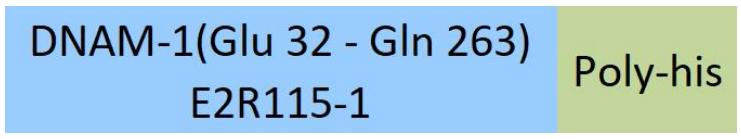
Synonym

DNAM1,CD226,PTA1

Source

Canine DNAM-1, His Tag (DN1-C52H4) is expressed from human 293 cells (HEK293). It contains AA Glu 32 - Gln 263 (Accession # E2R115-1).
Predicted N-terminus: Glu 32

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 28.2 kDa. The protein migrates as 36-50 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 PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

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.

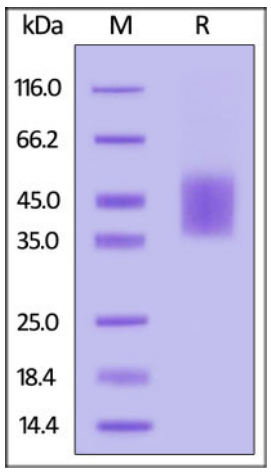
Storage

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

Please avoid repeated freeze-thaw cycles.

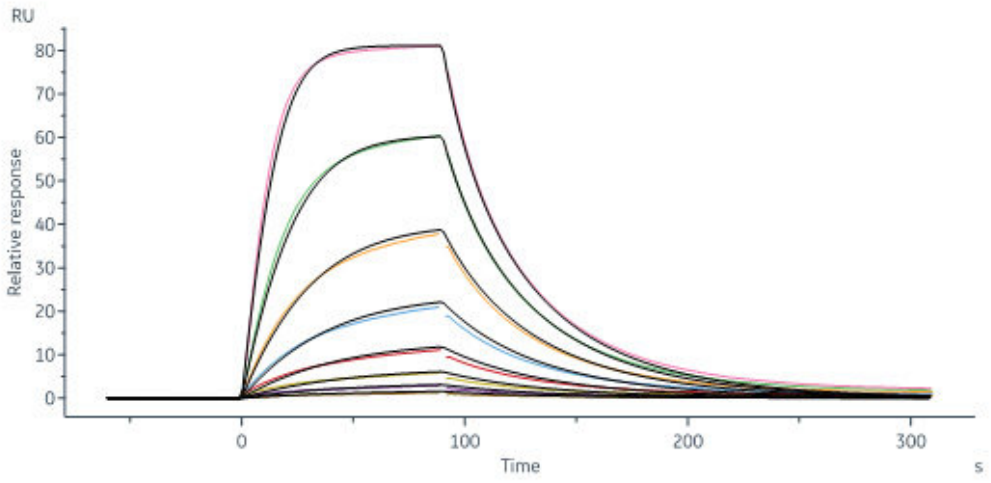
This product is stable after storage at:
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Canine DNAM-1, 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 95%.

Bioactivity-SPR



Human CD155, Fc Tag (Cat. No. CD5-H5251) captured on CM5 chip via Anti-human IgG Fc antibodies surface can bind Canine DNAM-1, His Tag (Cat. No. DN1-C52H4) with an affinity constant of 31.9 nM as determined in a SPR assay (Biacore 8K) (QC tested).

Background

DNAX accessory molecule 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.