

# Human DNAM-1/CD226 Protein

Cat. No. DAM-HM201

## Description

<b>Source</b>	Recombinant Human DNAM-1/CD226 Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Glu19-Asn247.
<b>Accession</b>	Q15762
<b>Molecular Weight</b>	The protein has a predicted MW of 52.8 kDa. Due to glycosylation, the protein migrates to 70-100 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.1 EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

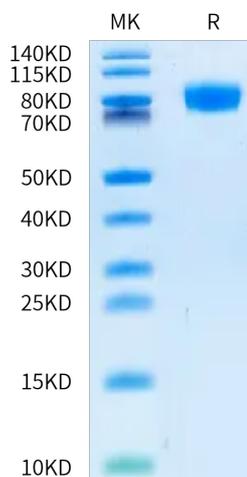
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

DNAM-1 (DNAM-1), also known as CD226, is a 65 kDa type I transmembrane glycoprotein in the immunoglobulin superfamily. 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.

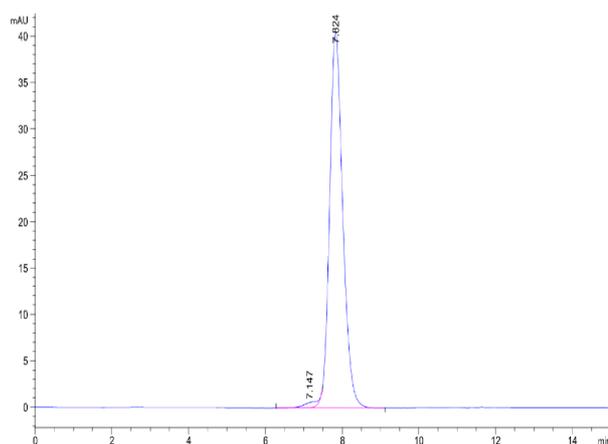
## Assay Data

### Bis-Tris PAGE



Human DNAM-1 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



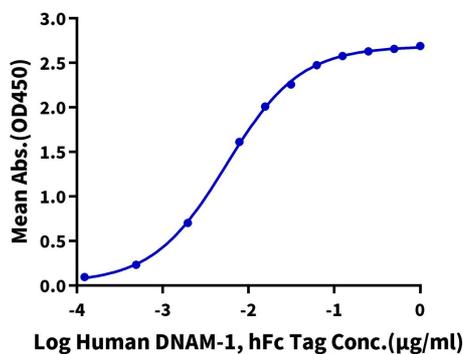
The purity of Human DNAM-1 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

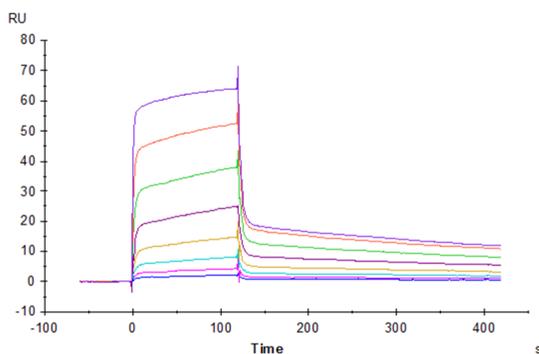
Human DNAM-1, hFc Tag ELISA

0.2µg Biotinylated Human CD155, His Tag Per Well



Immobilized Biotinylated Human CD155, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Human DNAM-1, hFc Tag with the EC50 of 5.5ng/ml determined by ELISA (QC Test).

SPR Data



Human DNAM-1, hFc Tag captured on CM5 Chip via Protein A can bind Rhesus macaque CD155, His Tag with an affinity constant of 0.234 µM as determined in SPR assay (Biacore T200).