

# Human DNAM-1/CD226 Protein

Cat. No. DAM-HM101

## Description

|                         |  |
|-------------------------|--|
| <b>Source</b>           | Recombinant Human DNAM-1/CD226 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus.<br>It contains Glu19-Asn247. |
| <b>Accession</b>        | Q15762   |
| <b>Molecular Weight</b> | The protein has a predicted MW of 28.9 kDa. Due to glycosylation, the protein migrates to 45-70 kDa based on Bis-Tris PAGE result.       |
| <b>Endotoxin</b>        | Less than 1EU per µg by the LAL method.  |
| <b>Purity</b>           | > 95% as determined by Bis-Tris PAGE<br>> 95% as determined by SEC-HPLC  |

## Formulation and Storage

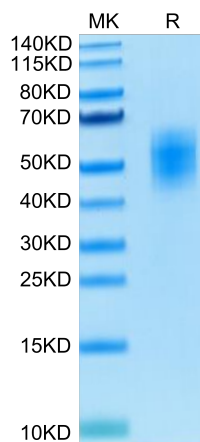
|                       |   |
|-----------------------|---|
| <b>Formulation</b>    | Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.  |
| <b>Reconstitution</b> | Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/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.

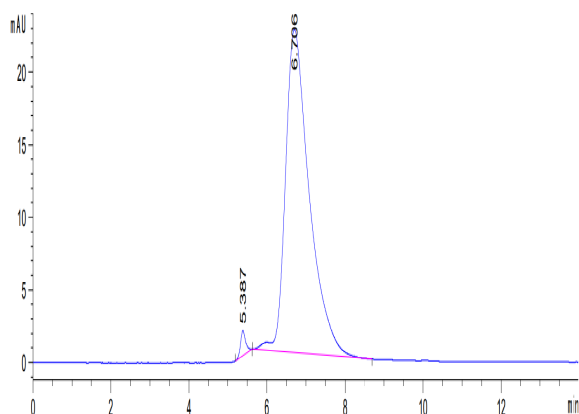
## Assay Data

### Bis-Tris PAGE



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

### SEC-HPLC



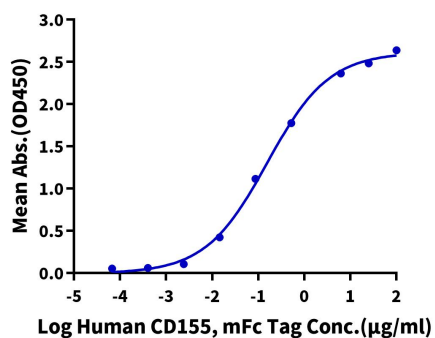
The purity of Human DNAM-1 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

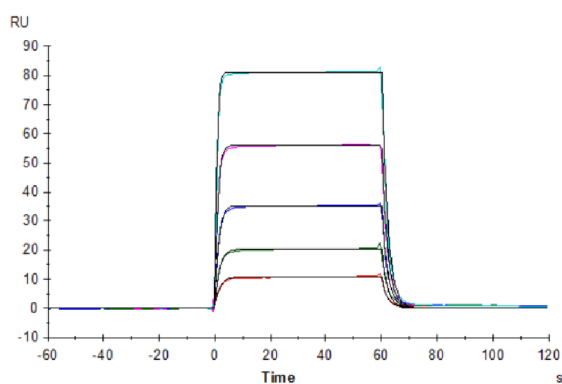
**Human DNAM-1, His Tag ELISA**

0.5µg Human DNAM-1, His Tag Per Well



Immobilized Human DNAM-1, His Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Human CD155, mFc Tag with the EC50 of 0.16µg/ml determined by ELISA (QC Test).

SPR Data



Human CD155, hFc Tag captured on Protein A chip, can bind Human DNAM-1, His Tag with an affinity constant of 0.22µM as determined in a SPR assay (Biacore T200).