Data Sheet (Cat.No.TMPY-05487)

TargetMol

DNAM-1/CD226 Protein, Human, Recombinant (hFc)

General Information

Synonyms:	PTA1;DNAM1;TLiSA1;DNAM-1;CD226 molecule
Protein Construction:	Glu19-Asn247
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q15762
Molecular Weight:	52.8 kDa (Predicted); 70-100 kDa (Due to glycosylation)

QC Testing

Biological Activity:	Immobilized Biotinylated Human CD155, His Tag at 1 μg/ml (100 μl/well) on the plate. Dose response curve for Human DNAM-1, hFc Tag with the EC50 of 10.6 ng/ml determined by ELISA (QC Test).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).
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from 0.22μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

DNAX accessory molecule-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.

Reference

Zola H,et al.(2007) CD molecules 2006-human cell differentiation molecules. J Immunol Methods. 318 (1-2): 1-5.
Ho IC,et al.(2009) GATA3 and the T-cell lineage: essential functions before and after T-helper-2-cell differentiation. Nat Rev Immunol. 9 (2): 125-35.
Matesanz-Isabel J,et al.(2011) New B-cell CD molecules. Immunology Letters.134 (2): 104-12.