Human CD226 / DNAM-1 Protein (His & Fc Tag)

Catalog Number: **10565-H03H**

General Information

Gene Name Synonym:

DNAM-1; DNAM1; PTA1; TLiSA1

Protein Construction:

A DNA sequence encoding the human DNAM1 (NP_006557.2) extracellular domain (Met 1-Asn 247) was fused with the C-terminal polyhistidine-tagged Fc region of human IgG1 at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA. 1. Immobilized CD112-his at 20 μg/ml (100 μl/well) can bind biotinylated DNAM1 with a linear range of 0.078-2.5 μg/ml. 2. Immobilized CD112-Fc at 20 μg/ml (100 μl/well) can bind biotinylated DNAM1 with a linear range of 0.078-5 μg/ml. 3. Immobilized human CD155 at 20 μg/ml (100 μl/well) can bind human DNAM1 Fc chimera with a linear ranger of 1.28-160 ng/ml.

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Glu 19

Molecular Mass:

The recombinant human DNAM1/Fc is a disulfide-linked homodimer. The reduced monomer consists of 477 amino acids and has a predicted molecular mass of 54 kDa. As a result of glycosylation, the apparent molecular mass of rh DNAM1/Fc monomer is approximately 80-90 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

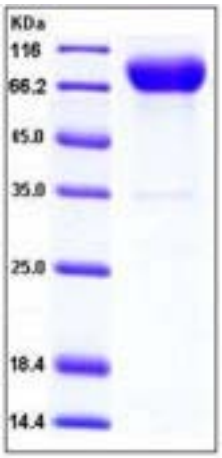
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

The cluster of differentiation (CD) system is commonly used as cell markers in immunophynotyping. Different kinds of cells in the immune system can be identified through the surface CD molecules which associating with the immune function of the cell. There are more than 320 CD unique clusters and subclusters have been identified. Some of the CD molecules serve as receptors or ligands important to the cell through initiating a signal cascade which then alter the behavior of the cell. Some CD proteins do not take part in cell signal process but have other functions such as cell adhesion. CD226, also known as PTA1 or DNAM-1, is a member of the immunoglobulin superfamily containing 2 Ig-like domains of the V-set. High rate of CD226 (Cluster of Differentiation 226) is found on the surface of natural killer cells, platelets, monocytes and a subset of T cells. CD226 have binding sites with CD112 and CD155 and mediate cellular adhesion to other cells containing its ligands.

References

1.Zola H, *et al.* (2007) CD molecules 2006-human cell differentiation molecules. J Immunol Methods. 318 (1-2): 1-5. 2.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. 3.Matesanz-Isabel J, *et al.* (2011) New B-cell CD molecules. Immunology Letters.134 (2): 104-12.