Data Sheet (Cat.No.TMPY-05421)

TargetMol

CD2 Protein, Human, Recombinant (hFc)

General Information

Synonyms:	SRBC;CD2 molecule;LFA-2;T11
Protein Construction:	Lys25-Asp209
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P06729
Molecular Weight:	47.9 kDa (Predicted); 55-65 kDa (Reducing conditions due to glycosylation)

QC Testing

Biological Activity:	Human CD58, hFc Tag immobilized on CM5 Chip can bind Human CD2, hFc Tag with an affinity constant of 7.38 nM 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

The CD2 family of receptors is evolutionarily conserved and widely expressed on cells within the hematopoietic compartment. In recent years several new members have been identified with important roles in the immune system. CD2 family members regulate natural killer (NK) cell lytic activity and inflammatory cytokine production when engaged by ligands on tumor cells.

Reference

Yang JJ,et al.(2001) Structural biology of the cell adhesion protein CD2: alternatively folded states and structure-function relation. Curr Protein Pept Sci. 2(1): 1-17.
Wilkins AL,et al.(2003) Structural biology of the cell adhesion protein CD2: from molecular recognition to protein folding and design.
Curr Protein Pept Sci. 4(5): 367-73.McNerney ME,et al.(2006) The CD2 family of natural killer cell receptors. Curr Top Microbiol Immunol. 298: 91-120.

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