Data Sheet (Cat.No.TMPY-02407)

TargetMol

CD302 Protein, Mouse, Recombinant (His)

General Information

Synonyms:	AI159627;CD302 molecule;1110055L24Rik
Protein Construction:	A DNA sequence encoding the extracellular domain of mouse CD302 isoform 2 (Q9DCG2-2) (Met 1-His 156) was fused with a polyhistidine tag at the C-terminus. Predicted N terminal: Asp 21
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	Q9DCG2-2
Molecular Weight:	17 kDa (predicted); 23 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 93 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

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

CD302/CLEC13A (C-type lectin domain family 13 member A), also known as C-type lectin receptor DCL-1, is a type I transmembrane C-type lectin DCL-1/CD302. DCL-1 protein was highly conserved among the human, mouse, and rat orthologs. DCL-1 ectodomain contains only one CRD, whereas other type I transmembrane C-type lectins contain more than one domain (e.g. selectins and MMR). DCL-1 CP contains several putative motifs, including a

Tyr-based internalization, a cluster of acidic amino acids, and Ser and Tyr phosphorylation motifs, suggesting that DCL-1 CP mediates not only endocytosis and late endosome targeting but also signaling. DCL-1 may be another cell/matrix adhesion receptor integrated in cell adhesion complexes and that DCL-1 dysfunction may affect APC adhesion and migration, causing suppression of APC function.

Reference

Kato M, et al. (2007) The novel endocytic and phagocytic C-Type lectin receptor DCL-1/CD302 on macrophages is colocalized with F-actin, suggesting a role in cell adhesion and migration. J Immunol. 179(9): 6052-63.
Skinnider BF, et al. (2002) The role of cytokines in classical Hodgkin lymphoma. Blood. 99(12): 4283-97.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481