Data Sheet (Cat.No.TMPY-03928)

TargetMol

CLEC5A Protein, Rhesus, Recombinant (mFc)

General Information

Synonyms:	C-type lectin domain family 5, member A
Protein Construction:	A DNA sequence encoding the rhesus CLEC5A (XP_001085243.1) (Pro28-Arg188) was expressed with the Fc region of mouse IgG1 at the N-terminus. Predicted N terminal: Asp
Species:	Rhesus
Expression Host:	HEK293 Cells
Accession:	A0A1D5QX52
Molecular Weight:	45.3 kDa (predicted)

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:	> 90 % 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

CLEC5A, also known as MDL1 and MDL-1, is a member of the C-type lectin/C-type lectin-like domain (CTL/CTLD) superfamily. Members of this family share a common protein fold and have diverse functions, such as cell adhesion, cell-cell signalling, glycoprotein turnover, and roles in inflammation and immune response. CLEC5A with dnax-activation protein 12 and may play a role in cell activation. It also functions as a positive regulator of osteoclastogenesis. CLEC5A acts as a key regulator of synovial injury and bone erosion during autoimmune joint

inflammation .The binding of dengue virus to CLEC5A triggers signaling through the phosphylation of TYROBP, this interaction does not result in viral entry, but stimulates proinflammatory cytokine release.

Reference

Chen ST. et al., 2008, Nature. 453 (7195): 672-6.
Davila S. et al., 2010, Genes Immun. 11 (3): 232-8.
Hillier LW. et al., 2003, Nature. 424 (6945): 157-64.