Data Sheet (Cat.No.TMPY-02459)

TargetMol

CLEC10A Protein, Mouse, Recombinant (hFc)

General Information

Synonyms:	Mgl1;C-type lectin domain family 10, member A;CD301a;Mgl;M-ASGP-BP-1
Protein Construction:	A DNA sequence encoding the extracellular domain of mouse CLEC10A (NP_001191181.1) (Gln 58-Ser 305) was fused with the Fc region of human IgG1 at the N-terminus. Predicted N terminal: Glu
Species:	Mouse
Expression Host:	HEK293 Cells
Accession:	F8WHB7
Molecular Weight:	56.7 kDa (predicted); 58 kDa (reducing conditions)

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:	> 86 % 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

CLEC10A, also known as the macrophage galactose-type calcium-type lectins (MGLs; CD301) constitute a unique class of C-type lectins because of their specificity for galactose and its structural homologues. MGLs/CD301 is a type II transmembrane glycoproteins and is expressed on macrophages and related cells of myeloid origins, particularly immature dendritic cells (DCs). There are 2 homologues: MGL1 and MGL2 (CD301a and CD301b) in

mice. MGL1/CD301a induces both the production and secretion of interleukin (IL)-10. MGL1/CD301a plays a protective role against colitis by effectively inducing IL-10 production by colonic lamina propria macrophages in response to invading commensal bacteria.

Reference

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Osto E,et al.(2008) c-Jun N-terminal kinase 2 deficiency protects against hypercholesterolemia-induced endothelial dysfunction and oxidative stress. 118(20): 2073-80.
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Chen P,et al.(2010) Jnk2 effects on tumor development, genetic instability and replicative stress in an oncogene-driven mouse mammary tumor model. PLoS One. 5(5): e10443.