Mouse CLEC10A / MGL1 / CD301 Protein (Fc Tag)

Catalog Number: **50707-M01H**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

CD301; CLECSF13; CLECSF14; HML; HML2; MGL; CD301a; M-ASGP-BP-1; Mgl; Mgl1

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.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 86 % as determined by SDS-PAGE

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

Molecular Mass:

The recombinant mouse CLEC10A/Fc is a disulfide-linked homodimer. The reduced monomer comprises 508 amino acids and predicts a molecular mass of 56.7 kDa. The apparent molecular mass of the monomer is approximately 58 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:

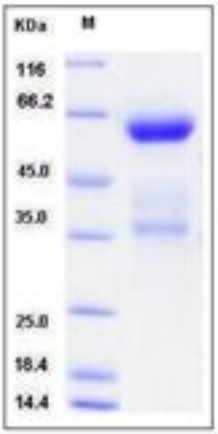
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

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.

References

1.Saba K, *et al.* (2009) A C-type lectin MGL1/CD301a plays an anti-inflammatory role in murine experimental colitis. Am J Pathol. 174(1): 144-52.
2.Suzuki N, *et al.* (2002) Molecular cloning and expression of cDNA encoding human macrophage C-type lectin: its unique carbohydrate binding specificity for Tn antigen. J Immunol. 1996 ;156: 128-135.
3.Tsuiji M, *et al.* (2002) Molecular cloning and characterization of a novel mouse macrophage C-type lectin, mMGL2, which has a distinct carbohydrate specificity from mMGL1. J Biol Chem. 277: 28892-28901.