Mouse CD300A Protein (Fc Tag)

Catalog Number: **50675-M02H**

General Information

Gene Name Synonym:

B230315M08Rik; Clm8; LMIR1; MAIR-I; MAIR-Ia; mcpir1; MMAC8; Pigr4

Protein Construction:

A DNA sequence encoding the mouse CD300A (Q6SJQ0-1) (Met 1-Arg 183) extracellular domain was fused with the Fc region of human IgG1 at the C-terminus.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 92 % 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: Leu 28

Molecular Mass:

The recombinant mouse CD300A/Fc is a disulfide-linked homodimer. The reduced monomer comprises 397 amino acids and has a predicted molecular mass of 44.2 kDa. The apparent molecular mass of rmCD300A/Fc monomer is approximately 55-65 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:

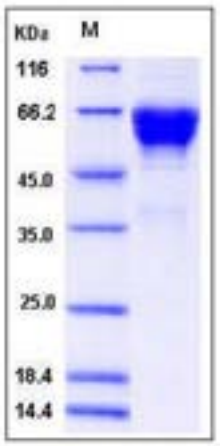
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

CMRF35-like molecule 8, also known as CD300 antigen-like family member A, CMRF35-H9, Immunoglobulin superfamily member 12, Inhibitory receptor protein 60, NK inhibitory receptor, CD300a and CMRF35H, is a single-pass type I membrane protein which belongs to theCD300 family. The CD300 family of myeloid immunoglobulin receptors includes activating (CD300b, CD300e) and inhibitory members (CD300a, CD300f), as well as molecules presenting a negative charge within their transmembrane domain (CD300c, CD300d). CD300A / IGSF12 is expressed not only by natural killer (NK) cells but also by T-cell subsets, B-cells, dendritic cells, mast cells, granulocytes and monocytes.It contains oneIg-like V-type (immunoglobulin-like) domain. CD300A / IGSF12 is an inhibitory receptor which may contribute to the down-regulation of cytolytic activity in natural killer (NK) cells, and to the down-regulation of mast cell degranulation. CD300c is a functional immune receptor able to deliver activating signals upon ligation in RBL-2H3 mast cells. CD300c signaling is partially mediated by a direct association with the immune receptor tyrosine-based activation motif-bearing adaptor FcεRγ. CD300a and CD300c play an important role in the cross-regulation of TNF-alpha and IFN-alpha secretion from plasmacytoid dendritic cells (pDCs).

References

1.Bachelet,I. et al., 2005, J. Immunol. 175:7989-7995. 2.Bachelet,I. et al., 2008, J Immunol. 180 (9):6064-9. 3.Ju,X. et al., 2008, Blood. 112 (4):1184-94.