Mouse CD69 / CLEC2C / AIM Protein (His Tag, ECD)

Catalog Number: **50731-M08H**

General Information

Gene Name Synonym:

5830438K24Rik; AI452015; AIM; VEA

Protein Construction:

A DNA sequence encoding the mouse Cd69 (NP_001028294.1) (Asn62-Arg199) was expressed with a polyhistidine tag at the C-terminus.

Source: Mouse

Expression Host: HEK293 Cells

QC Testing

Purity: > 85 % as determined by SDS-PAGE.

Endotoxin:

< 1.0 EU per μg 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: Asn 62

Molecular Mass:

The recombinant mouse Cd69 consists 149 amino acids and predicts a molecular mass of 17.3 kDa.

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:

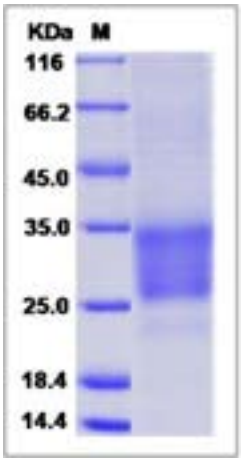
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Early activation antigen CD69, also known as activation inducer molecule (AIM), is a single-pass type II membrane protein. Recently, cDNA clones encoding human and mouse CD69 were isolated and showed CD69 to be a member of the C-type lectin superfamily. It is one of the earliest cell surface antigens expressed by T cells following activation. Once expressed, CD69 acts as a costimulatory molecule for T cell activation and proliferation. In addition to mature T cells, CD69 is inducibly expressed by immature thymocytes, B cells, natural killer (NK) cells, monocytes, neutrophils and eosinophils, and is constitutively expressed by mature thymocytes and platelets. CD69 is involved in lymphocyte proliferation and functions as a signal transmitting receptor in lymphocytes, natural killer (NK) cells, and platelets. The structure, chromosomal localization, expression and function of CD69 suggest that it is likely a pleiotropic immune regulator , potentially important in the activation and differentiation of a wide variety of hematopoietic cells. This membrane molecule transiently expresses on activated lymphocytes, and its selective expression in inflammatory infiltrates suggests that it plays a role in the pathogenesis of inflammatory diseases. CD69 plays a crucial role in the pathogenesis of allergen-induced eosinophilic airway inflammation and hyperresponsiveness and that CD69 could be a possible therapeutic target for asthmatic patients.

References

1.Ziegler SF, *et al.* (1994) The activation antigen CD69. Stem Cells. 12(5): 456-65. 2.Marzio R, *et al.* (1999) CD69 and regulation of the immune function. Immunopharmacol Immunotoxicol. 21(3): 565-82. 3.Lamana A, *et al.* (2006) The role of CD69 in acute neutrophil-mediated inflammation. Eur J Immunol. 36(10): 2632-8.