

Recombinant Mouse CD69 Protein (Fc tag, ECD)

Catalog Number: PKSM040514

Note: Centrifuge before opening to ensure complete recovery of vial contents.

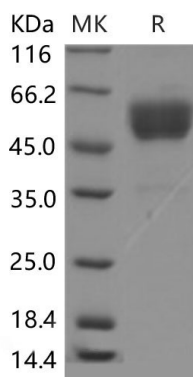
Description

Species	Mouse
Source	HEK293 Cells-derived Mouse CD69 protein Gly64-Arg199, with an N-terminal hFc
Calculated MW	44.1 kDa
Accession	NP_001028294.1
Bio-activity	Not validated for activity

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Reconstitution	Please refer to the specific buffer information in the printed manual. Please refer to the printed manual for detailed information.

Data



> 90 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

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.