Recombinant Human CLEC2C/CD69 protein (GST,His Tag)

Catalog Number: PDEH101071



Description	
Species	Human
Source	E.coli-derived Human CLEC2C protein Val63-Lys 199, with an N-terminal GST & C-
	terminal His
Mol_Mass	40.0 kDa
Accession	Q07108
Bio-activity	Not validated for activity
Properties	
Purity	>95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg 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 $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with 5% Trehalose and 5%
	Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of
	0.5 mg/mL. Concentration is measured by UV-Vis.

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

Background

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.

For Research Use Only