Recombinant Human CD69 Protein (aa 64-199, His Tag)

Catalog Number: PKSH033694

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

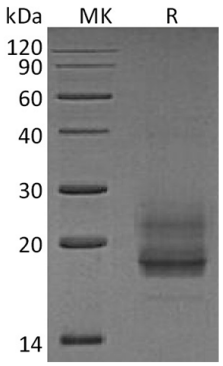
Description

Species	Human
Source	HEK293 Cells-derived Human CD69 protein Gly64-Lys199, with an N-terminal His
Calculated MW	16.9 kDa
Observed MW	18-28 kDa
Accession	Q07108
Bio-activity	Not validated for activity

Properties

Purity	> 95 % 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 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Human Early Activation Antigen CD69 (CD69) is a type 2 transmembrane glycoprotein in the C-type lectin family. It plays roles in immune cell trafficking, inflammation, T cell memory, and humoral immune responses. CD69 is expressed on the cell surface as an approximately 60 kDa disulfide-linked homodimer. It is found on CD4+ T cells, CD8+ T cells, NK cells, NKT cells, gamma delta cells dendritic cells (DC) and is up-regulated on activated T cells and DC. Ligation of CD69 on DC induces IL2 production, leading to T cell proliferation. CD69 is important for the homing of CD4+ T cells and plasmablasts to the bone marrow but inhibits the migration of dermal DC to draining lymph nodes. It supports the expression of multiple chemokines and chemokine receptors but suppresses the expression of others. It associates with and negatively regulates S1P1 expression on DC and CD4+ T cells, resulting in a decreased chemotactic response to S1P. The direct interaction of CD69 with Galectin-1 contributes to the ability of CD69 to limit Th17 mediated inflamamtion while supporting the differentiation of regulatory T cells.