Recombinant Human CD69

Catalog No: CU12

Description	Recombinant Human Early Activation Antigen CD69 is produced by our Mammalian expression system and the target gene encoding Gly64-Lys199 is expressed with a 8His tag at the N-terminus.
Expression System	Human cells
Alternative name	Early activation antigen CD69; Activation inducer molecule; AIM; BL-AC/P26; C-type lectin domain family 2 member C; EA1; Early T-cell activation antigen p60; GP32/28; Leukocyte surface antigen Leu-23; MLR-3; CD69; CLEC2C
Accession No.	Q07108
Quality Control	Purity: greater than 95% as determined by reducing SDS-PAGE. Endotoxin: less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Storage	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. Always centrifuge tubes before opening. Do not mix by vortex or pipetting.
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.

SDS-PAGE