# ABclonal®

# **Recombinant Human CD69 Protein**

Catalog No.: RP00077 Recombinant

## **Sequence Information**

**Species Gene ID Swiss Prot** HEK293 cells 969 Q07108

Tags

C-His

**Synonyms** 

CD69;AIM;BL-AC/P26;CLEC2C;EA1;GP32/28;MLR-3

#### **Product Information**

**Source** Purification HEK293 cells > 95% by SDS-

PAGE.

#### **Endotoxin**

 $< 0.1 \; \text{EU/}\mu\text{g}$  of the protein by LAL method.

#### **Formulation**

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

#### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

#### **Contact**

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## **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.

#### **Basic Information**

#### **Description**

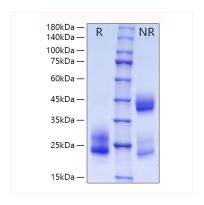
Recombinant Human CD69 Protein is produced by HEK293 expression system. The target protein is expressed with sequence (Ser 62 - Lys 199 ) of human CD69 (Accession #NP\_001772.1) fused with a  $6 \times \text{His}$  tag at the C-terminus.

#### **Bio-Activity**

#### **Storage**

Store at  $-20^{\circ}$ C. Store the lyophilized protein at  $-20^{\circ}$ C to  $-80^{\circ}$ C up to 1 year from the date of receipt. <br/>
-20°C for 3 months, at 2-8°C for up to 1 week.<br/>
Avoid repeated freeze/thaw cycles.

# **Validation Data**



Recombinant Human CD69 Protein was resolved with SDS PAGE under reducing (R) and non-reducing (NR) conditions , showing single bands at 20-26 kDa and 40-55 kDa, respectively.