

Recombinant Mouse CRTAM Protein(His Tag)

Catalog Number: PDMM100089

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

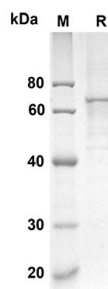
Description

Species	Mouse
Source	Mammalian-derived Mouse Crtam protein Ala17-Gly289, with an C-terminal His
Calculated MW	29.9 kDa
Observed MW	60-70 kDa
Accession	Q149L7
Bio-activity	Not validated for activity

Properties

Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 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°C 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 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.

Data



SDS-PAGE analysis of Mouse Crtam proteins, 2 µg/lane of Recombinant Mouse Crtam proteins was resolved with an SDS-PAGE under reducing conditions, showing bands at 29.9KD

Background

Cytotoxic and regulatory T-cell molecule, also known as Class-I MHC-restricted T-cell-associated molecule and CRTAM, is a single-pass type I membrane protein which belongs to the nectin family. CRTAM contains one Ig-like C2-type (immunoglobulin-like) domain and one Ig-like V-type (immunoglobulin-like) domain. In the immune system, the expression of CRTAM is restricted to activated class-I MHC-restricted cells, including NKT and CD8 cells. It is strongly expressed in spleen, thymus, small intestine, peripheral blood leukocyte, and in Purkinje neurons in cerebellum. It is expressed at much lower levels in testis, ovary, colon, lung and lymphoid tissues. CRTAM is a member of the immunoglobulin superfamily that complies with the structural characteristics of the JAM family of proteins and is phylogenetically more closely related to nectin-like proteins. It is a molecule involved in epithelial cell adhesion. CRTAM is sensitive to intermediate filament disruption and treatment of monolayers with an soluble CRTAM enhances cell-cell dissociation and lowers transepithelial electrical resistance. CRTAM may also induce retention by binding to CD8⁺ dendritic cells (DCs) at the late stage of activation before proliferation.