

CRTAM/CD355 Protein, Mouse (HEK293, His)

Cat. No.:	HY-P77907
Synonyms:	CD355 antigen; CD355; CRTAM
Species:	Mouse
Source:	HEK293
Accession:	Q149L7 (A17-G289)
Gene ID:	54698
Molecular Weight:	60-70 kDa

PROPERTIES

Appearance	Solution.
Formulation	Supplied as a 0.22 µm filtered solution of PBS, pH 7.4.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	N/A.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background

The CRTAM/CD355 protein functions as a key mediator of heterophilic cell-cell adhesion, playing a crucial role in regulating the activation, differentiation, and tissue retention of various T-cell subsets. Its interaction with CADM1 promotes natural killer (NK) cell cytotoxicity, IFNG/interferon-gamma secretion by CD8+ T-cells, and NK cell-mediated rejection of tumors expressing CADM1. CRTAM is involved in the regulation of CD8+ T-cell proliferation in response to T-cell receptor (TCR) activation, but it appears to be dispensable for CD8+ T-cell-mediated cytotoxicity. Additionally, its interaction with SCRIB promotes the late phase of cellular polarization in a subset of CD4+ T-cells, regulating TCR-mediated proliferation, as well as the production of IFNG, IL17, and IL22. CRTAM, by interacting with CADM1 on CD8+ dendritic cells, contributes to the retention of activated CD8+ T-cells within the draining lymph node. Furthermore, it is required for the intestinal retention of intraepithelial CD4+ CD8+ T-cells and, to a lesser extent, intraepithelial and lamina propria CD8+ T-cells and CD4+ T-cells. Its interaction with CADM1 also promotes adhesion to gut-associated CD103+ dendritic cells, facilitating the expression of gut-homing and adhesion molecules on T-cells and the conversion of CD4+ T-cells into CD4+ CD8+ T-cells. CRTAM may exist as a monomer or homodimer, with its homodimerization being influenced by interactions with CADM1. Additionally, it interacts with SCRIB, promoting polarization in a subset of CD4+ T-cells.

Caution: Product has not been fully validated for medical applications. For research use only.

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