

CRTAM/CD355 Protein, Canine (HEK293, His)

Cat. No.:	HY-P700700
Synonyms:	CD355 antigen; CD355; CRTAM
Species:	Canine
Source:	HEK293
Accession:	E2QWY2 (F18-G287)
Gene ID:	/
Molecular Weight:	55-70 kDa

PROPERTIES

Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.22 μ m filtered solution of PBS, pH 7.4. Normally 8% trehalose is added as protectant before lyophilization.
Endotoxin Level	<1 EU/ μ g, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 μ g/mL in ddH ₂ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	<p>CRTAM/CD355 Protein serves as a crucial mediator of heterophilic cell-cell adhesion, intricately regulating the activation, differentiation, and tissue retention of various T-cell subsets. Its interaction with CADM1 plays a pivotal role in promoting natural killer (NK) cell cytotoxicity, as well as IFNG/interferon-gamma secretion by CD8+ T-cells both in vitro and in vivo, contributing to NK cell-mediated rejection of CADM1-expressing tumors. CRTAM also modulates CD8+ T-cell proliferation in response to T-cell receptor (TCR) activation and, through interaction with SCRIB, facilitates the late phase of cellular polarization in a subset of CD4+ T-cells, regulating TCR-mediated proliferation and cytokine production. Moreover, CRTAM's interaction with CADM1 on CD8+ dendritic cells regulates the retention of activated CD8+ T-cells within draining lymph nodes. Essential for the intestinal retention of intraepithelial T-cell subsets, CRTAM further promotes adhesion to gut-associated CD103+ dendritic cells, facilitating the expression of gut-homing and adhesion molecules on T-cells. As a monomer that may form homodimers, CRTAM's intricate interactions, particularly with CADM1 and SCRIB, highlight its central role in orchestrating diverse cellular functions critical for immune responses and tissue homeostasis. Further exploration of these interactions will shed light on the precise mechanisms underlying CRTAM's regulatory functions.</p>
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Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA