



# Recombinant Protein Technical Manual

## Recombinant Cynomolgus CRTAM/CD355 Protein (His Tag) RPES2549

### Product Data:

**Product SKU:** RPES2549

**Size:** 10µg

**Species:** Cynomolgus

**Expression host:** Human Cells

**Uniprot:** A0A2K5TKL4

### Protein Information:

**Molecular Mass:** 30.8 kDa

**AP Molecular Mass:** 50-60 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 95% as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**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.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Cytotoxic and Regulatory T-Cell Molecule; Class-I MHC-Restricted T-Cell-Associated Molecule; CD355; CRTAM

## Immunogen Information:

**Sequence:** Ser18-Gly287

## Background:

Cytotoxic and Regulatory T-Cell Molecule (CRTAM) is a member of Nectin family under the immunoglobulin superfamily that is expressed by activated CD8+ and NK T cells. CRTAM is found in spleen, thymus, small intestine, peripheral blood, and it is highly expressed by Purkinje cells of the cerebellum. CRTAM is a type I transmembrane glycoprotein containing one Ig-like C2-type domain and one Ig-like V-type domain in its extracellular domain, while its cytoplasmic region shows a potential class I PDZ domain. CRTAM is expressed as a homodimer on the cell surface but does not show homotypic binding in trans. The high affinity of CRTAM/IGSF4 adhesion allows CRTAM to disrupt IGSF4 homotypic interactions. IGSF4 and T cell receptor coengagement of CD8+ cells expressing CRTAM induces increased IFN $\gamma$  or IL-22 production.