



Recombinant Protein Technical Manual

Recombinant Human SLAMF7/CD319 Protein (His Tag)(Active)

RPES0968

Product Data:

Product SKU: RPES0968

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_067004.3

Protein Information:

Molecular Mass: 23.8 kDa

AP Molecular Mass:

Tag: C-His

Bio-activity: Measured by its ability to bind biotinylated human SH2D1A-His in a functional ELISA.

Purity: > 93 % as determined by reducing SDS-PAGE.

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

Storage: 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 sterile PBS, pH 7.4

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

Application: Functional ELISA

Synonyms: SLAM Family Member 7; CD2 Subset 1; CD2-Like Receptor-Activating Cytotoxic Cells; CRACC; Membrane Protein FOAP2; Novel Ly9; Protein 19A; CD319; SLAMF7; CS1;SLAM7

Immunogen Information:

Sequence: Met 1-Met 226

Background:

SLAM family member 7 (SLAMF7), also known as CRACC, CD319, CD2-like receptor-activating cytotoxic cells, and CS1, is a single-pass type I membrane protein and a member of the CD2 family of cell surface receptors. SLAMF7 is expressed in NK cells, activated B-cells, NK-cell line but not in promyelocytic, B-cell lines, or T-cell lines. Although the cytoplasmic domain of CS1 contains immunoreceptor tyrosine-based switch motifs (ITSM), which enables to recruit signaling lymphocyte activation molecule (SLAM)-associated protein (SAP/SH2D1A), it activates NK cells in the absence of a functional SAP. CS1 is a self ligand and homophilic interaction of CS1 regulates NK cell cytolytic activity. CRACC positively regulated natural killer cell functions by a mechanism dependent on the adaptor EAT-2 but not the related adaptor SAP. However, in the absence of EAT-2, CRACC potently inhibited natural killer cell function. It was also inhibitory in T cells, which are typically devoid of EAT-2. Thus, CRACC can exert activating or inhibitory influences on cells of the immune system depending on cellular context and the availability of effector proteins.