Recombinant Protein Technical Manual

Recombinant Human SLAMF7/CD319 Protein (His Tag)

RPES2590

Product Data:

Product SKU: RPES2590

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: Q9NQ25

Protein Information:

Molecular Mass: 23.3 kDa

AP Molecular Mass: 39 kDa

Tag: C-6His

Bio-activity:

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

Endotoxin: < 1.0 EU per µg 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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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 20mM PB, 150mM NaCl, pH 7.4.

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

Application:

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: Ser23-Ser225

Background:

SLAMF7 is a single-pass type I membrane protein and contains 1 Ig-like C2-type (immunoglobulin-like) domain. 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 recruite signaling lymphocyte activation molecule (SLAM)-associated protein (SAP/SH2D1A), it activates NK cells in the absence of a functional SAP. SLAMF7 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, SLAMF7 can exert activating or inhibitory influences on cells of the immune system depending on cellular context and the availability of effector proteins.