



# Recombinant Protein Technical Manual

## Recombinant Human SLAMF3/CD229 Protein (His Tag)

RPES0918

### Product Data:

**Product SKU:** RPES0918

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** Q9HBG7

### Protein Information:

**Molecular Mass:** 45.6 kDa

**AP Molecular Mass:** 75 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°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, pH7.4.

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

**Application:**

**Synonyms:** T-lymphocyte surface antigen Ly-9; Cell surface molecule Ly-9; Lymphocyte antigen 9; SLAM family member 3; SLAMF3; Signaling lymphocytic activation molecule 3; CD229; Ly9

## Immunogen Information:

**Sequence:** Lys48-Lys454

## Background:

SLAMF3 (CD229) is a type I transmembrane glycoprotein in the SLAM subgroup of the CD2 family. Mature human SLAMF3 consists of a 407 amino acid (aa) extracellular domain (ECD) with two Ig-like V-set and two Ig-like truncated C2-set domains. The ECD of human SLAMF3 shares 57% - 59% aa sequence identity with mouse and rat SLAMF3. Within the first two Ig-like domains that are common to all SLAM proteins, human SLAMF3 shares 24% - 39% aa sequence identity with human 2B4, BLAME, CD2F0, CD84, CRACC, NTB-A, and SLAM. It is expressed on T and B cells, thymocytes, and more weakly on NK cells. It may participate in adhesion reactions between T lymphocytes and accessory cells by homophilic interaction. Promotes T-cell differentiation into a helper T-cell Th17 phenotype leading to increased IL7 secretion; the costimulatory activity requires SH2D1A. SLAMF3 may be involved in the maintenance of peripheral cell tolerance by serving as a negative regulator of the immune response. It also disable autoantibody responses and inhibit IFN-gamma secretion by CD4+ T-cells and negatively regulate the size of thymic innate CD8+ T-cells and the development of invariant natural killer T (iNKT) cells.