



# Recombinant Protein Technical Manual

## Recombinant Human SLAMF5/CD84 Protein (aa 1-225, His Tag)

RPES2139

### Product Data:

**Product SKU:** RPES2139

**Size:** 50µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_003865.1

### Protein Information:

**Molecular Mass:** 24 kDa

**AP Molecular Mass:** 45 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 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:**

**Synonyms:** SLAM family member 5; Cell surface antigen MAX.3; Hly9-beta; Leukocyte differentiation antigen CD84; Signaling lymphocytic activation molecule 5; CD84; SLAMF5;hCD84;LY9B;mCD84

## Immunogen Information:

**Sequence:** Met 1-Gly 225

## Background:

The CD2 family receptors are type I transmembrane glycoproteins belonging to immunoglobulin (Ig) superfamily characterized by a membrane-proximal Ig constant 2 (C2) domain and a membrane-distal variable (V) domain that is responsible for ligand recognition. CD84, also known as LY9B and SLAMF5, is a homophilic member of the SLAM (signaling lymphocyte activation molecule) subfamily of the CD2 family. The SLAM family receptors mediate signal transduction through the interaction of its ITSM (immunoreceptor tyrosine-based switch motifs) in the intracellular region and the SH2 domain of adaptor molecules SAP (SLAM-associated protein) and EAT-2 (EWS-activated transcript 2), and accordingly modulate both adaptive and innate immune responses. The CD84-CD84 interaction was independent of its cytoplasmic tail. Thus, CD84 is its own ligand and acts as a costimulatory molecule. CD84 is expressed on cells from almost all hematopoietic lineages and on CD34+ hematopoietic progenitor cells, suggesting that CD84 serves as a marker for committed hematopoietic progenitor cells.