



Recombinant Protein Technical Manual  
Recombinant Human SIRP gamma/CD172g Protein  
(His Tag)(Active)  
RPES0679

### Product Data:

**Product SKU:** RPES0679

**Size:** 50µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_061026.2

### Protein Information:

**Molecular Mass:** 34.7 kDa

**AP Molecular Mass:**

**Tag:** C-His

**Bio-activity:** Measured by its binding ability in a functional ELISA. Immobilized human SIRPG-His at 10 µg/ml (100 µl/well) can bind human CD47-Fc, The EC50 of human CD47-Fc is 0.58.34 µg/ml.

**Purity:** > 96 % 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:** Signal-Regulatory Protein Gamma; SIRP-Gamma; CD172 Antigen-Like Family Member B; Signal-Regulatory Protein Beta-2; SIRP-b2; SIRP-Beta-2; CD172g; SIRPG; SIRPB2

## Immunogen Information:

**Sequence:** Met 1-Ser 364

## Background:

Signal-regulatory protein gamma (SIRPG/SIRP gamma) also known as CD172 antigen-like family member B, CD172g, and CD172g antigen, is a member of the signal-regulatory protein (SIRP) family, and also belongs to the immunoglobulin superfamily. SIRP family members are receptor-type transmembrane glycoproteins known to be involved in the negative regulation of receptor tyrosine kinase-coupled signaling processes. SIRPG/SIRP gamma/CD172g is probable immunoglobulin-like cell surface receptor. On binding with CD47, SIRPG can mediate cell-cell adhesion. SIRPG/SIRP gamma is engagement on T-cells by CD47 on antigen-presenting cells results in enhanced antigen-specific T-cell proliferation and costimulates T-cell activation. SIRPG/SIRP gamma/CD172g is detected in liver, and at very low levels in brain, heart, lung, pancreas, kidney, placenta and skeletal muscle. Expressed on CD4+ T-cells, CD8+ T-cells, CD56-bright natural killer (NK) cells, CD20+ cells, and all activated NK cells. This cytokine is mainly present in the paracortical T-cell area of lymph nodes, with only sparse positive cells in the mantle and in the germinal center of B-cell follicles. In the thymus, SIRPG is primarily expressed in the medulla on mature T-lymphocytes that have undergone thymic selection.