



# Recombinant Protein Technical Manual

## Recombinant Rat CD47 Protein (His Tag)(Active)

RPES4699

### Product Data:

**Product SKU:** RPES4699

**Size:** 50µg

**Species:** Rat

**Expression host:** HEK293 Cells

**Uniprot:** P97829

### Protein Information:

**Molecular Mass:** 15.2 kDa

**AP Molecular Mass:** 27-35 kDa

**Tag:** C-His

**Bio-activity:** Measured by its binding ability in a functional ELISA. Immobilized Rat CD47-His at 10 µg/ml (100 µl/well) can bind mouse SIRPA-Fc, The EC50 of mouse SIRPA-Fc is 0.6.4 µg/ml.

**Purity:** > 90 % as determined by 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:** CD47

## Immunogen Information:

**Sequence:** Met1-Lys140

## Background:

CD47 contains 1 Ig-like V-type (immunoglobulin-like) domain and is a receptor for the C-terminal cell binding domain of thrombospondin. It may play a role in membrane transport and signal transduction. CD47 is also a membrane protein, which is involved in the increase in intracellular calcium concentration that occurs upon cell adhesion to extracellular matrix. It is very broadly distributed on normal adult tissues, as well as ovarian tumors, being especially abundant in some epithelia and the brain. CD47 may play a role in membrane transport and/or integrin dependent signal transduction. It may prevent premature elimination of red blood cells. It also may be involved in membrane permeability changes induced following virus infection. By acting as an adhesion receptor for THBS1 on platelets, CD47 plays a role in both cell adhesion and in the modulation of integrins. It also plays an important role in memory formation and synaptic plasticity in the hippocampus.