



Recombinant Protein Technical Manual

Recombinant Mouse CD47 Protein (Fc Tag)

RPES1079

Product Data:

Product SKU: RPES1079

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: Q61735-2

Protein Information:

Molecular Mass: 42.8 kDa

AP Molecular Mass: 60-90 kDa

Tag: C-Fc

Bio-activity:

Purity: > 95 % as determined by 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: LAP;OA3;Leukocyte Surface Antigen CD47; Antigenic Surface Determinant Protein OA3; Integrin-Associated Protein;Protein MER6; CD47; MER6

Immunogen Information:

Sequence: Gln19-Pro158

Background:

CD47, also known as Integrin-Associated Protein (IAP) and OA3, is a glycosylated atypical member of the immunoglobulin superfamily. Mouse CD47 is an integral membrane protein that consists of a extracellular domain (ECD) with a single Ig-like domain, five membrane-spanning regions with short intervening loops, and C-terminal cytoplasmic tail. CD47 has a role in both cell adhesion by acting as an adhesion receptor for THBS1 on platelets, and in the modulation of integrins. It plays an important role in memory formation and synaptic plasticity in the hippocampus. As a receptor for SIRPA, its binding to which prevents maturation of immature dendritic cells and inhibits cytokine production by mature dendritic cells. Interaction with SIRPG mediates cell-cell adhesion, it enhances superantigen-dependent T-cell-mediated proliferation and costimulates T-cell activation. It may play a role in membrane transport and/or integrin dependent signal transduction. It also prevents premature elimination of red blood cells.