

## Recombinant Mouse CD47 protein (His Tag)

**Catalog Number: PDEM100308**

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

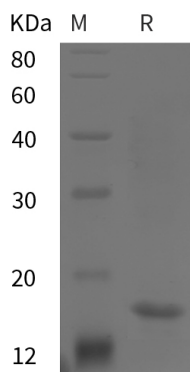
### Description

<b>Species</b>	Mouse
<b>Source</b>	E.coli-derived Mouse CD47 protein Gln19-Lys 140, with an N-terminal His
<b>Mol_Mass</b>	13.3 kDa
<b>Accession</b>	Q61735
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 10 EU/mg of the protein as determined by the LAL method
<b>Storage</b>	Generally, 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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

### Data



> 95 % as determined by reducing SDS-PAGE.

### 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 SIRPγ 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.

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