

Recombinant Mouse CD47 protein (His Tag)

Catalog Number: PDEM100308

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

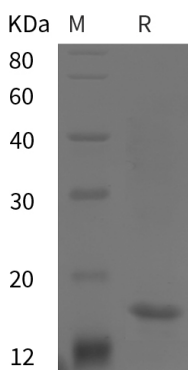
Description

Species	Mouse
Source	E.coli-derived Mouse CD47 protein Gln19-Lys 140, with an N-terminal His
Calculated MW	13.3 kDa
Observed MW	15 kDa
Accession	Q61735
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	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.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	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 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.

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