

Recombinant Mouse CD47 Protein (Fc Tag)

Catalog No. PKSM041043

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

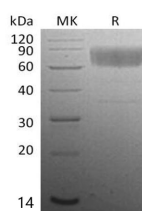
Description

Synonyms	LAP;OA3;Leukocyte Surface Antigen CD47;Antigenic Surface Determinant Protein OA3;Integrin-Associated Protein;Protein MER6;CD47;MER6
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Gln19-Pro158
Accession	Q61735-2
Calculated Molecular Weight	42.8 kDa
Observed molecular weight	60-90 kDa
Tag	C-Fc
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg 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 of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

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

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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.