

Recombinant Mouse CD47 (C-6His)

Catalog No: CS30

Description	Recombinant Mouse Leukocyte Surface Antigen CD47 is produced by our Mammalian expression system and the target gene encoding Gln19-Pro158 is expressed with a 6His tag at the C-terminus.
Source	Human Cells
Alternative name	Leukocyte Surface Antigen CD47; Antigenic Surface Determinant Protein OA3; Integrin-Associated Protein; IAP; Protein MER6; CD47; MER6
Accession No.	Q61735-2
Predicted Molecular Weight	16.7kDa
AP Molecular Weight	30-60kDa, reducing conditions.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
Quality Control	Purity: Greater than 95% as determined by reducing SDS-PAGE. Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Storage	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

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, it binding to which prevents maturation of immature dendritic cells and inhibits cytokine production by mature dendritic cells. Interaction with SIRPG mediates cellcell 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.

