

Mouse CD47 Protein

Cat. No. CD7-MM147

Description

Source	Recombinant Mouse CD47 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Gln19-Lys140.
Accession	Q61735-1
Molecular Weight	The protein has a predicted MW of 14.9 kDa. Due to glycosylation, the protein migrates to 35-50 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

Formulation and Storage

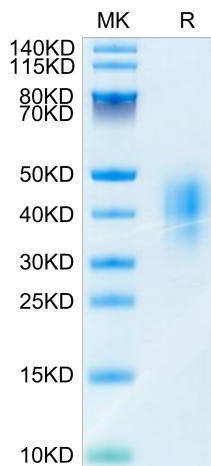
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

CD47 (Cluster of Differentiation 47) also known as integrin associated protein (IAP) is a transmembrane protein that in humans is encoded by the CD47 gene. CD47 belongs to the immunoglobulin superfamily and partners with membrane integrins and also binds the ligands thrombospondin-1 (TSP-1) and signal-regulatory protein alpha (SIRPα). CD-47 acts as a don't eat me signal to macrophages of the immune system which has made it a potential therapeutic target in some cancers.

Assay Data

Tris-Bis PAGE



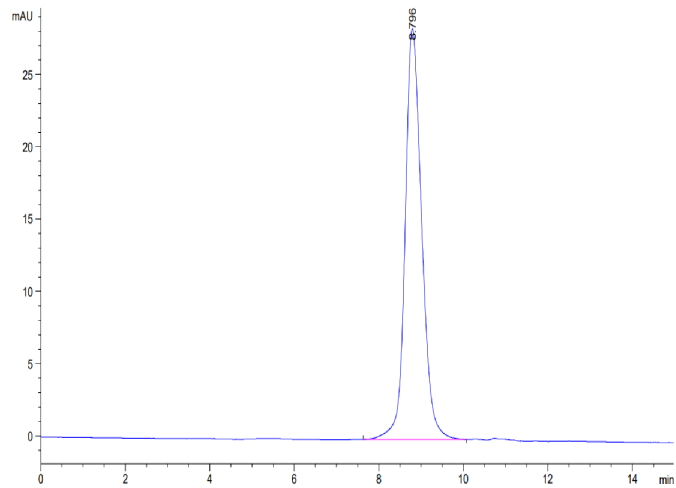
Mouse CD47 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

Mouse CD47 Protein

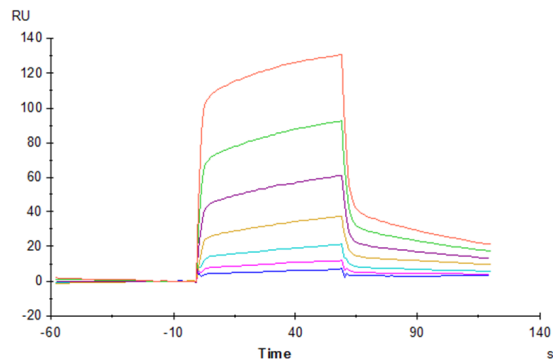
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Assay Data



The purity of Mouse CD47 is greater than 95% as determined by SEC-HPLC.

SPR Data



Mouse SIRP alpha, His Tag immobilized on CM5 Chip can bind Mouse CD47, His Tag with an affinity constant of $1.33 \mu\text{M}$ as determined in SPR assay (Biacore T200).