

Human CD47 Protein

Cat. No. CD7-HM247

Description

Source	Recombinant Human CD47 Protein is expressed from HEK293 with hFc tag at the C-Terminus. It contains Gln19-Pro139.
Accession	Q08722-1
Molecular Weight	The protein has a predicted MW of 40.5 kDa. Due to glycosylation, the protein migrates to 55-65 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

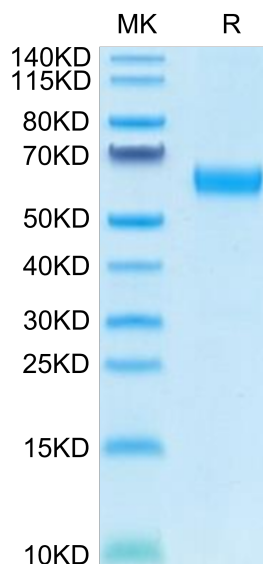
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months 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

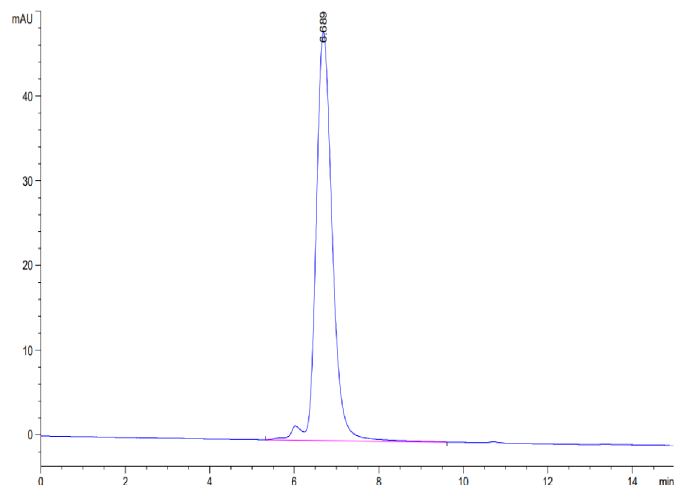
Bis-Tris PAGE



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

SEC-HPLC

Assay Data

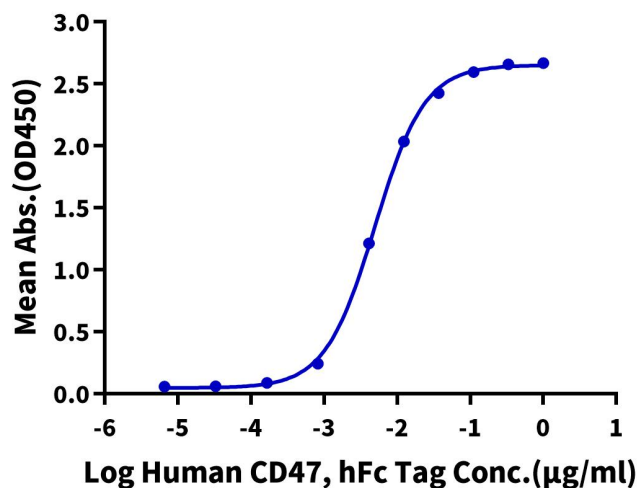


The purity of Human CD47 is greater than 95% as determined by SEC-HPLC.

ELISA Data

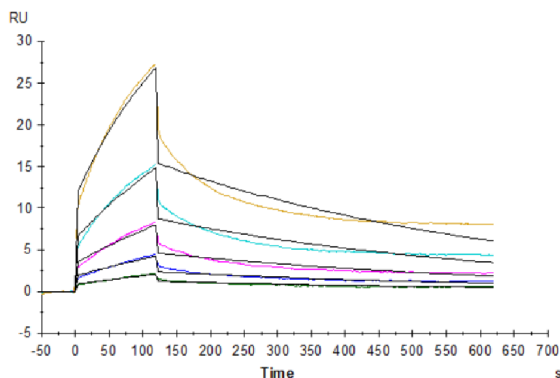
Human CD47, hFc Tag ELISA

0.1µg Human SIRP alpha, His Tag Per Well



Immobilized Human SIRP alpha, His Tag at 1µg/ml (100µl/Well) on the plate. Dose response curve for Human CD47, hFc Tag with the EC50 of 5.0ng/ml determined by ELISA (QC Test).

SPR Data



Human CD47, hFc Tag captured on CM5 Chip via Protein A can bind Human Sirpa V2, His Tag with an affinity constant of 13.8nM as determined in SPR assay (Biacore T200).