Human SIRP alpha/CD172a Protein

Cat. No. SRP-HM272

Description

Source	Recombinant Human SIRP alpha/CD172a Protein is expressed from HEK293 with hFc tag at the C-Terminus.
	It contains Glu31-Arg370.
Accession	P78324-1
Molecular Weight	The protein has a predicted MW of 64.1 kDa. Due to glycosylation, the protein migrates to 78-90 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 SEC-HPLC

Formulation and Storage

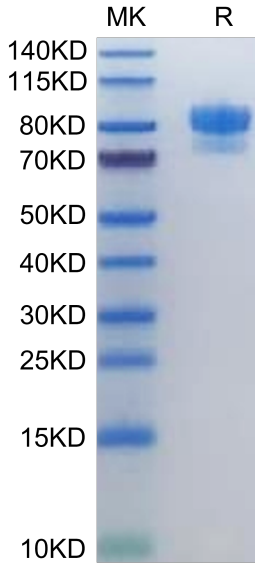
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled 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

Signal regulatory protein α (SIRPα) is a regulatory membrane glycoprotein from SIRP family expressed mainly by myeloid cells and also by stem cells or neurons.SIRPα acts as inhibitory receptor and interacts with a broadly expressed transmembrane protein CD47 also called the "don´t eat me" signal.Cancer cells highly expressed CD47 that activate SIRP α and inhibit macrophage-mediated destruction.

Assay Data

Bis-Tris PAGE



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

SEC-HPLC

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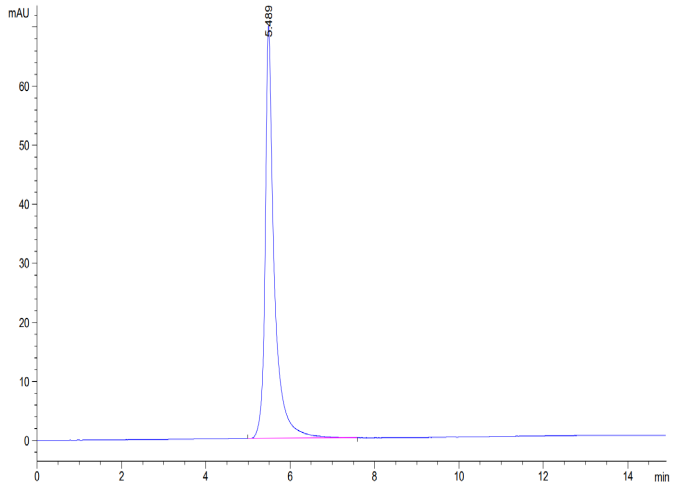
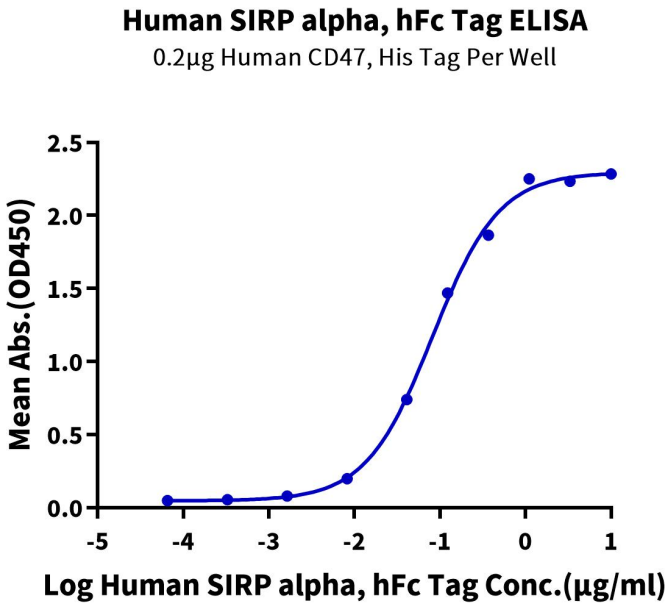
Assay Data



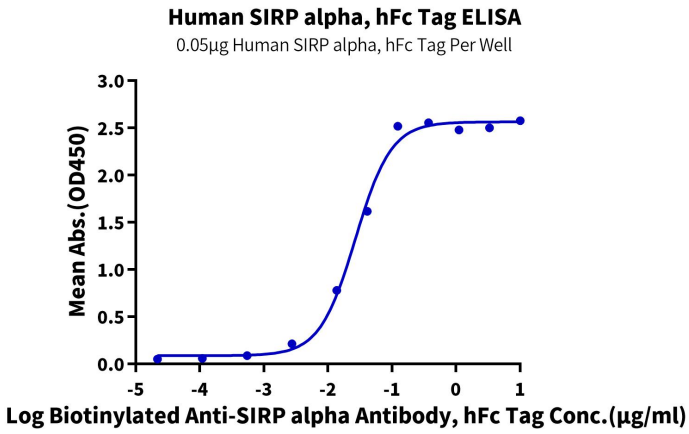
The purity of SIRP alpha is greater than 95% as determined by SEC-HPLC.

ELISA Data



Immobilized Human CD47, His Tag at 2μg/ml (100μl/well) on the plate. Dose response curve for Human SIRP alpha, hFc Tag with the EC50 of 82.1ng/ml determined by ELISA (QC Test).

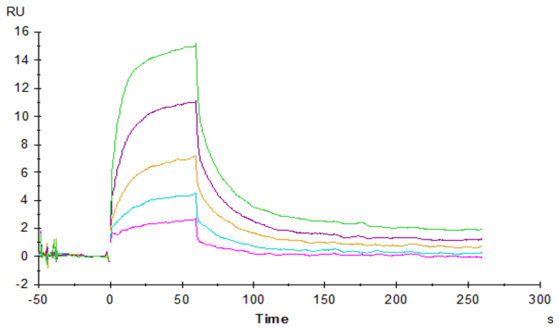
ELISA Data



Immobilized Human SIRP alpha, hFc Tag at 0.5μg/ml (100μl/Well) on the plate. Dose response curve for Biotinylated Anti-SIRP alpha Antibody, hFc Tag with the EC50 of 26.9ng/ml determined by ELISA.

SPR Data

Assay Data



Human CD47, His Tag captured on CM5 Chip via Anti-His Antibody can bind Human SIRP alpha, hFc Tag with an affinity constant of 18.9nM as determined in SPR assay (Biacore T200).