

Mouse SIRP alpha/CD172a Protein

Cat. No. SRP-MM172

Description

Source	Recombinant Mouse SIRP alpha/CD172a Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Lys32-Asn373.
Accession	BAA13520.1
Molecular Weight	The protein has a predicted MW of 39 kDa. Due to glycosylation, the protein migrates to 65-85 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

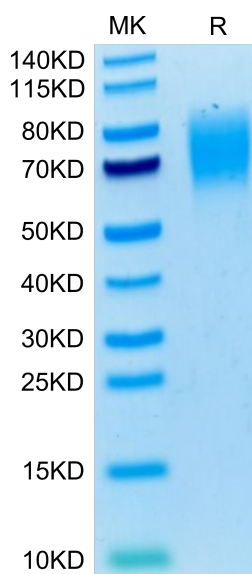
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized 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 (SIRP α) is a regulatory membrane glycoprotein from SIRP family expressed mainly by myeloid cells and also by stem cells or neurons. SIRP α 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

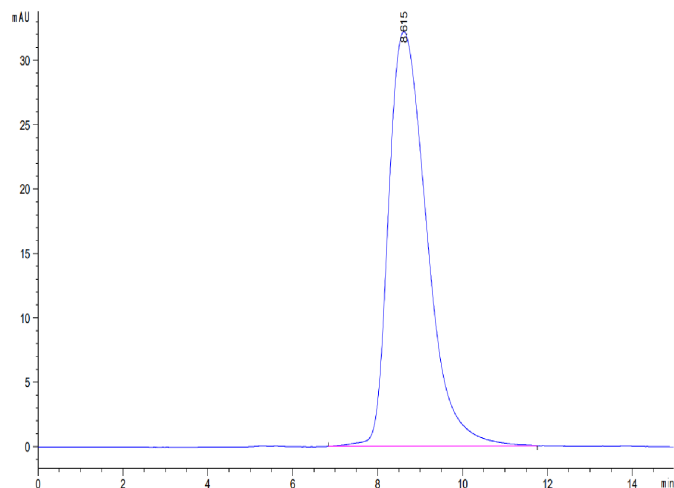
Bis-Tris PAGE



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

SEC-HPLC

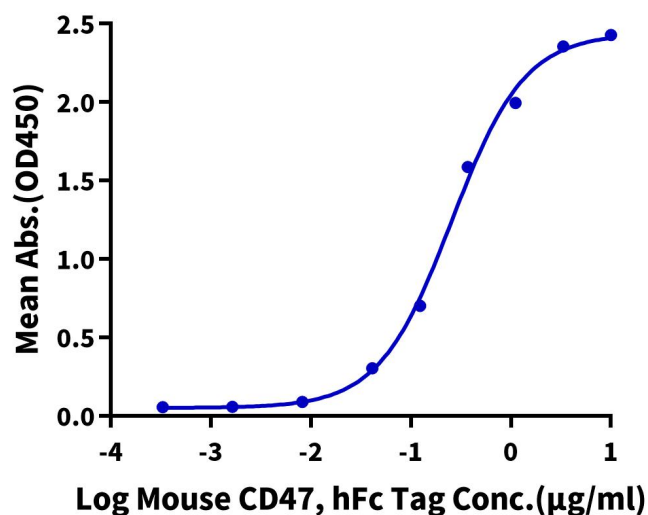
Assay Data



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

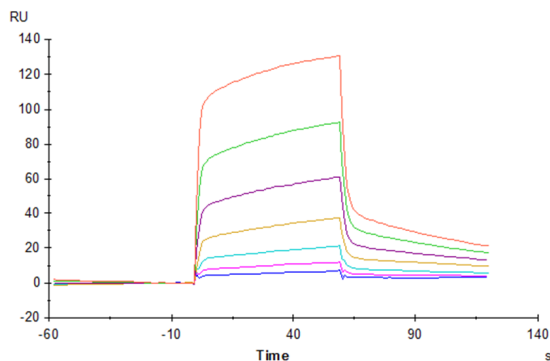
ELISA Data

Mouse CD47, hFc Tag ELISA
0.1µg Mouse SIRP alpha, His Tag Per Well



Immobilized Mouse SIRP alpha, His Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Mouse CD47, hFc Tag with the EC50 of 0.26µg/ml determined by ELISA (QC Test).

SPR Data



Mouse SIRP alpha, His Tag immobilized on CM5 Chip can bind Mouse CD47, His Tag with an affinity constant of 1.33 µM as determined in SPR assay (Biacore T200).