

Human SIRP alpha V2/CD172a Protein

Cat. No. SRP-HM1V2

Description

Source	Recombinant Human SIRP alpha V2/CD172a Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Glu31-Arg369.
Accession	AAH26692.1
Molecular Weight	The protein has a predicted MW of 38 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

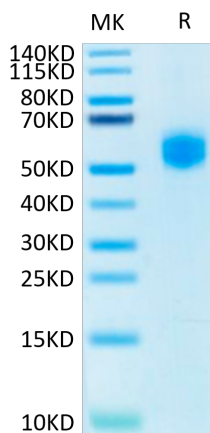
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 24 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.

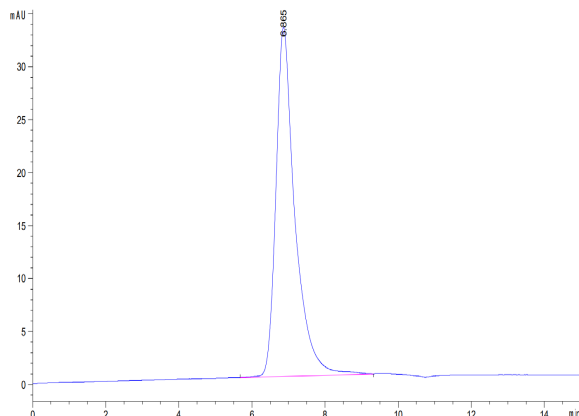
Assay Data

Bis-Tris PAGE



Human SIRP alpha V2 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC



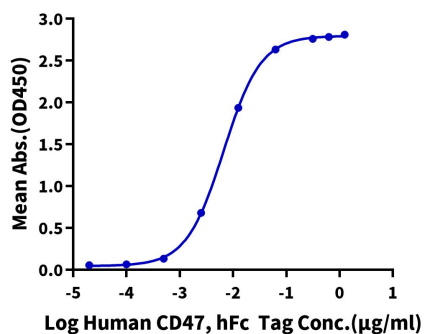
The purity of Human SIRP alpha V2 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human SIRP alpha V2, His Tag ELISA

0.2µg Human SIRP alpha V2, His Tag Per Well

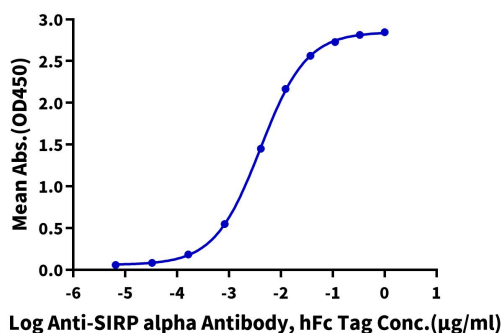


Immobilized Human SIRP alpha V2, His Tag at 2µg/ml (100µl/Well) on the plate. Dose response curve for Human CD47, hFc Tag with the EC50 of 6.7ng/ml determined by ELISA (QC Test).

ELISA Data

Human SIRP alpha V2, His Tag ELISA

0.05µg Human SIRP alpha V2, His Tag Per Well

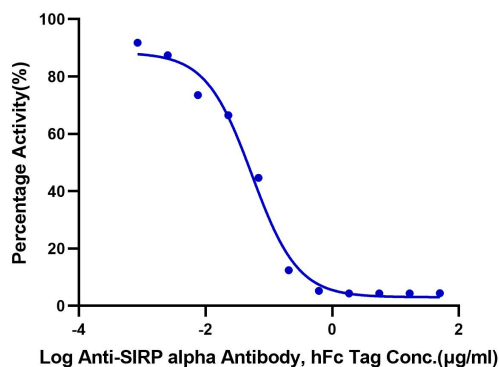


Immobilized Human SIRP alpha V2, His Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Anti-SIRP alpha Antibody, hFc Tag with the EC50 of 4.0ng/ml determined by ELISA.

Blocking Data

Inhibition of Human SIRP alpha V2 and CD47 Binding

0.5µg Human SIRP alpha V2, His Tag Per Well



Serial dilutions of Anti-SIRP alpha Antibody, hFc Tag were added into Human SIRP alpha V2, His Tag : Biotinylated Human CD47 Protein, His Tag binding reactions. The half maximal inhibitory concentration (IC50) is 54.14ng/ml.