

Product datasheet

Recombinant human SIRP alpha protein (Fc Chimera Active) ab221235

5 Images

Description

<b>Product name</b>	Recombinant human SIRP alpha protein (Fc Chimera Active)	
<b>Biological activity</b>	Measured by its binding ability in a functional ELISA. Immobilized ab221235 at 2 µg/mL (100 µL/well) can bind Human CD47, His Tag with a linear range of 1.56-12.5 ng/mL.	
<b>Purity</b>	> 95 % SDS-PAGE. >90% pure as determined by SEC-HPLC.	
<b>Endotoxin level</b>	< 1.000 Eu/µg	
<b>Expression system</b>	HEK 293 cells	
<b>Accession</b>	<a href="#">P78324</a>	
<b>Protein length</b>	Protein fragment	
<b>Animal free</b>	No	
<b>Nature</b>	Recombinant	
<b>Species</b>	Human	
<b>Sequence</b>	<pre> EEELQVIQPDKSVLVAAGETATLRCTATSLIPVGPIQWF RGAGPGRELIY NQKEGHFPRVTTVSDLTKRNNMDFSIRIGNITPADAGTY YCVKFRKGSPD DVEFKSGAGTELSVRAKPSAPVVSGPAARATPQHTV SFTCESHGFSPRDI TLKWFKNGNELSDFQTNVDPVGESVSYSIHSTAKVVL TREDVHSQVICEV AHVTLQGDPLRGTANLSETIRVPPPTLEVTTQQPVRAENQ VNVTCQVRKFYP QRLQLTWLENGNVSRTETASTVTENKDGTYNWMSWL LVNNSAHRDDVKLT CQVEHDGQPAVSKSHDLKVS AHPKEQGSNTAAENTG SNER </pre>	
<b>Predicted molecular weight</b>	64 kDa including tags	
<b>Amino acids</b>	31 to 370	
<b>Additional sequence information</b>	Extracellular domain; Accession # NP_001035111. This protein carries a Human IgG1 Fc tag at the C-terminus (Pro 100- Lys 330; P01857)	

## Specifications

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Our [Abpromise guarantee](#) covers the use of **ab221235** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** SDS-PAGE  
HPLC  
Functional Studies

**Form** Lyophilised

## Preparation and Storage

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**Stability and Storage** Shipped at 4°C. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 7.50

Constituents: 0.61% Tris, 0.75% Glycine, 5% Trehalose

Lyophilized from 0.22 µm filtered solution.

This product is an active protein and may elicit a biological response in vivo, handle with caution.

**Reconstitution** It is recommended to reconstitute the lyophilized product in sterile deionized water to a final concentration of 1 mg/mL. Solubilize for 30 to 60 minutes at room temperature with occasional gentle mixing. Carrier protein (0.1% HSA or BSA) is strongly recommended for further dilution and long term storage.

## General Info

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**Function** Immunoglobulin-like cell surface receptor for CD47. Acts as docking protein and induces translocation of PTPN6, PTPN11 and other binding partners from the cytosol to the plasma membrane. Supports adhesion of cerebellar neurons, neurite outgrowth and glial cell attachment. May play a key role in intracellular signaling during synaptogenesis and in synaptic function (By similarity). Involved in the negative regulation of receptor tyrosine kinase-coupled cellular responses induced by cell adhesion, growth factors or insulin. Mediates negative regulation of phagocytosis, mast cell activation and dendritic cell activation. CD47 binding prevents maturation of immature dendritic cells and inhibits cytokine production by mature dendritic cells.

**Tissue specificity** Ubiquitous. Highly expressed in brain. Detected on myeloid cells, but not T-cells. Detected at lower levels in heart, placenta, lung, testis, ovary, colon, liver, small intestine, prostate, spleen, kidney, skeletal muscle and pancreas.

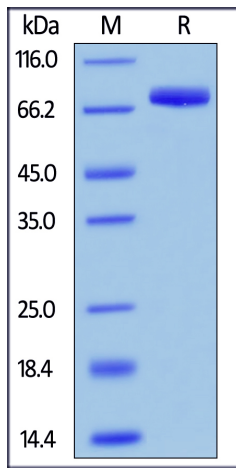
**Sequence similarities** Contains 2 Ig-like C1-type (immunoglobulin-like) domains.  
Contains 1 Ig-like V-type (immunoglobulin-like) domain.

**Post-translational modifications** N-glycosylated.  
Phosphorylated on tyrosine residues in response to stimulation with EGF, growth hormone, insulin and PDGF. Dephosphorylated by PTPN11.

**Cellular localization** Membrane.

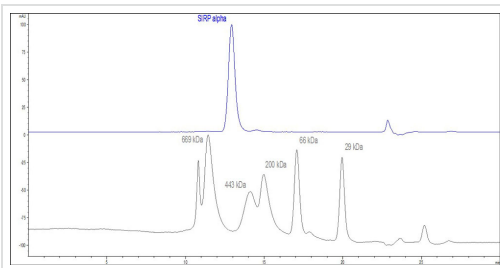
## Images

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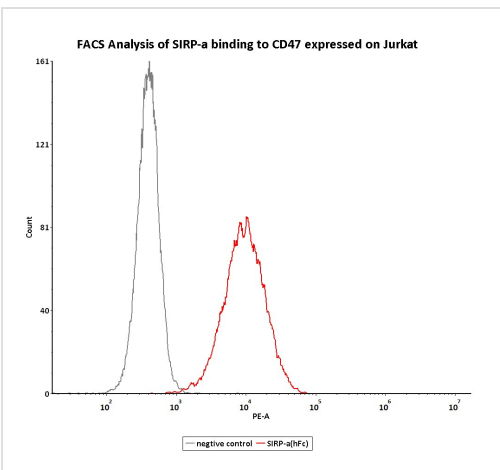
Human SIRP alpha, Fc Tag (HPLC-verified) on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

SDS-PAGE - Recombinant human SIRP alpha protein (Fc Chimera Active) (ab221235)



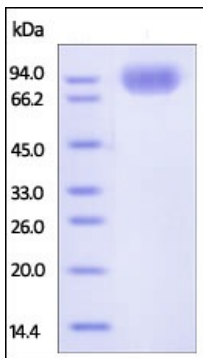
The purity of Human SIRP alpha, Fc Tag (HPLC-verified) was greater than 90% as determined by SEC-HPLC.

Functional Studies - Recombinant human SIRP alpha protein (Fc Chimera Active) (ab221235)



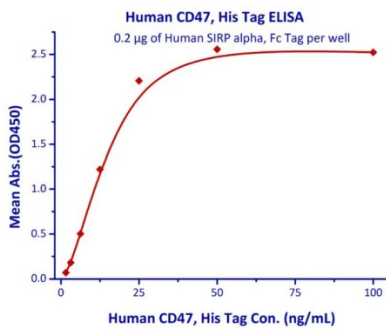
FACS assay shows that recombinant Human SIRP alpha, Fc Tag (HPLC-verified) can bind to Jurkat cell expressing CD47. The concentration of SIRP alpha used is 1 µg/ml.

Functional Studies - Recombinant human SIRP alpha protein (Fc Chimera Active) (ab221235)



SDS-PAGE - Recombinant human SIRP alpha protein (Fc Chimera Active) (ab221235)

SDS-PAGE analysis of ab221235 under reducing conditions, stained overnight with Coomassie Blue. As a result of glycosylation, the reduced protein migrates as 70-105 kDa.



ELISA - Recombinant human SIRP alpha protein (Fc Chimera Active) (ab221235)

Immobilized ab221235 at 2 µg/mL (100 µL/well) can bind Human CD47, His Tag with a linear range of 1.56-12.5 ng/mL.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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