

Product datasheet

Recombinant human SIRP alpha protein (Fc Chimera Active) ab221235

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Description

Product name	Recombinant human SIRP alpha protein (Fc Chimera Active)	
Biological activity	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.	
Purity	> 95 % SDS-PAGE. >90% pure as determined by SEC-HPLC.	
Endotoxin level	< 1.000 Eu/µg	
Expression system	HEK 293 cells	
Accession	<u>P78324</u>	
Protein length	Protein fragment	
Animal free	No	
Nature	Recombinant	
Species	Human	
Sequence	EEELQVIQPKSVLVAAGETATLRCTATSLIPVGPIQWFRG AGPGRELIY NQKEGHFPRVTTVSDLTKRNNMDFSIRIGNITPADAGTYIC VKFRKGSPPD DVEFKSGAGTELSVRAKPSAPVVS GPAARATPQHTVSFT CESHGFSPRDI TLKWFKNGNELSDFQTNVDPVGESVSYSIHSTAKVVLTRE DVHSQVICEV AHVTLQGDPLRGTANLSETIRVPPTLEVTQQPVRAENQVN VTCQVRKFYP QRLQLTWLENGNVSRTETASTVTENKDGTYNWMSWLLVN VSAHRDDVKLT CQVEHDGQPAVSKSHDLKVS AHPKEQGSNTAAENTGSN ER	
Predicted molecular weight	64 kDa including tags	
Amino acids	31 to 370	
Additional sequence information	Extracellular domain; Accession # NP_001035111. This protein carries a Human IgG1 Fc tag at the C-terminus (Pro 100- Lys 330; P01857)	

Specifications

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 Lyophilized

Preparation and Storage

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

pH: 7.4

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 Reconstitute with sterile deionized water to a concentration of 400 µg/ml.

General Info

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.

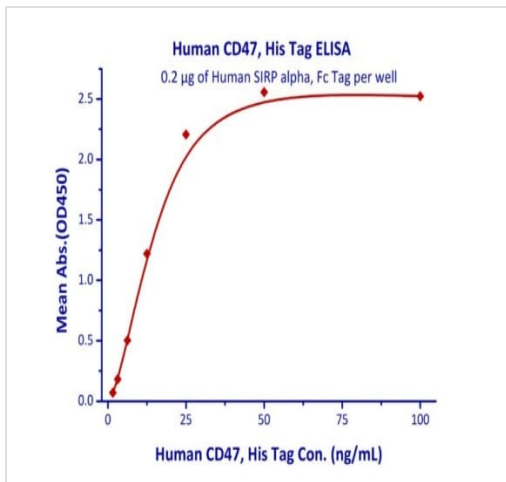
Tissue specificity Ubiquitous. Highly expressed in brain. Detected on myeloid cells, but not T-cells. Detected at lower levels in heart, placenta, lung, testis, ovary, colon, liver, small intestine, prostate, spleen, kidney, skeletal muscle and pancreas.

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.

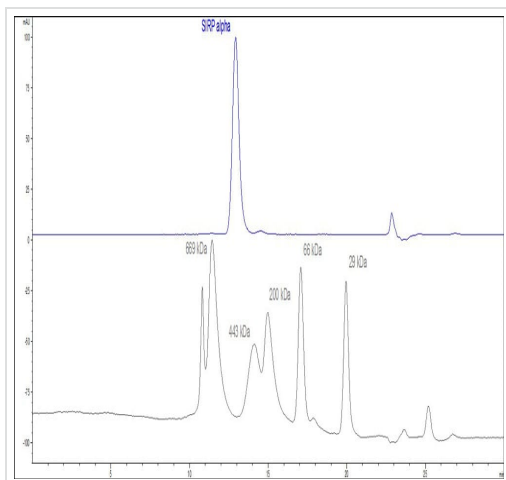
Cellular localization Membrane.

Images



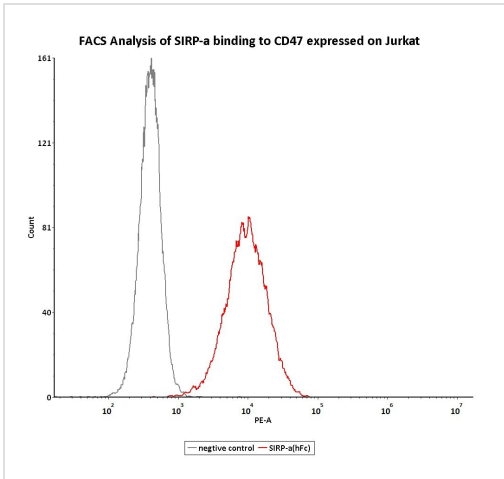
Immobilized ab221235 at 2 µg/mL (100 µL/well) can bind Human CD47, His Tag with a linear range of 1.56-12.5 ng/mL.

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



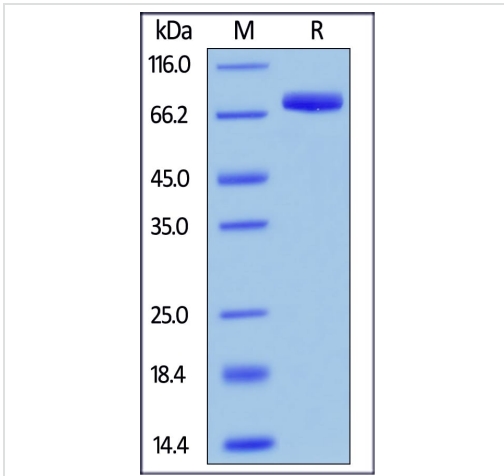
The purity of Human SIRP alpha, Fc Tag (HPLC-verified) was greater than 90% as determined by SEC-HPLC.

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



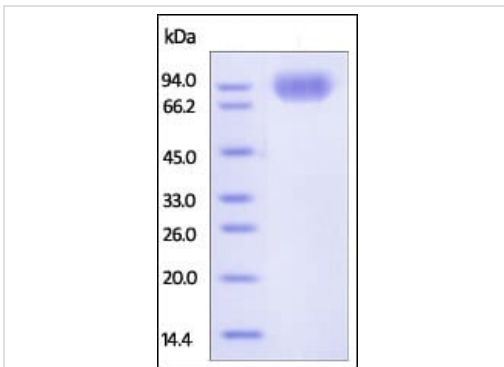
FACS assay shows that recombinant Human SIRP alpha, Fc Tag (HPLC-verified) can bind to Jurkat cell expressing CD47. The concentration of SIRP alpha used is 1 µg/ml.

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



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)



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.

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

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