

SIRP alpha Active Protein | SIRPA active protein

SIRP alpha Protein, Human, Recombinant (G75A, ECD, His Tag)

CATALOG #
AAA257985

HOST
HEK293 Cells

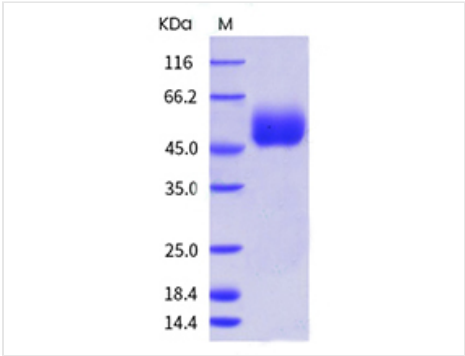
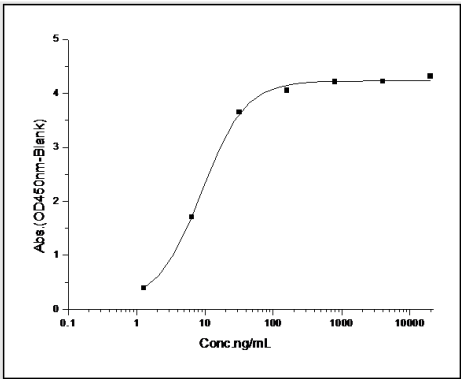
PRODUCT SYNONYMS

SIRP alpha; SIRP alpha Protein; Human; Recombinant (G75A; ECD; His Tag); Human SIRP alpha/CD172a Protein (ECD; BIT Protein; CD172A Protein; MFR Protein; MYD-1 Protein; P84 Protein; PTPNS1 Protein; SHPS1 Protein; SIRP Protein; signal-regulatory protein alpha; SIRPA active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>98% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Arg37 0,Gly75Ala
Species	Human
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Glu 31
Tag	C-His
Protein Construction	A DNA sequence encoding the human SIRPA (NP_542970.1, with natural variant Gly 75 Ala) extracellular domain (Met1-Arg370) was expressed fused with a polyhistidine tag at the C-terminus.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Activity	Measured by its binding ability in a functional ELISA. Immobilized human SIRPA-His at 10ug/ml (100uL/well) can bind human CD47-Fc. The EC50 of human CD47-Fc is 10.1-23.5ng/mL.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.

IMAGES



SDS-PAGE

Application Data

Measured by its binding ability in a functional ELISA. Immobilized human SIRPA-His at 10 ug/ml (100 ul/well) can bind human CD47-Fc, The EC50 of human CD47-Fc is 10.1-23.5 ng/ml.

ADDITIONAL INFORMATION

Related Product Information for SIRPA active protein	Background: Tyrosine-protein phosphatase non-receptor type substrate 1, also known as SHP substrate 1, Inhibitory receptor SHPS-1, Brain Ig-like molecule with tyrosine-based activation motifs, Macrophage fusion receptor, CD172 antigen-like family member A, SIRPA and CD172a, is a single-pass type I membrane protein which contains two Ig-like C1-type (immunoglobulin-like) domains and one Ig-like V-type (immunoglobulin-like) domain. SIRPA is ubiquitously expressed. It is highly expressed in brain and detected at lower levels in heart, placenta, lung, testis, ovary, colon, liver, small intestine, prostate, spleen, kidney, skeletal muscle and pancreas. It is also detected on myeloid cells, but not T-cells. SIRPA is an immunoglobulin-like cell surface receptor for CD47. SIRPA acts as docking protein and induces translocation of PTPN6, PTPN11 and other binding partners from the cytosol to the plasma membrane. SIRPA supports adhesion of cerebellar neurons, neurite outgrowth and glial cell attachment. It may play a key role in intracellular signaling during synaptogenesis and in synaptic function. SIRPA is involved in the negative regulation of receptor tyrosine kinase-coupled cellular responses induced by cell adhesion, growth factors or insulin. It mediates negative regulation of phagocytosis, mast cell activation and dendritic cell activation.
Product Categories/Family for SIRPA active protein	Cancer Drug Targets
References	Timms JF. et al., 1999, Curr Biol. 9: 927-30. Stofega MR. et al., 2000, J Biol Chem. 275: 28222-9. Liu T. et al., 2005, J Proteome Res. 4: 2070-80. Wolf-Yadlin A. et al., 2007, Proc Natl Acad Sci. 104: 5860-5.

NCBI AND UNIPROT INFORMATION

NCBI GI #	18426911
NCBI GeneID	140885
NCBI Accession #	NP_542970.1
NCBI GenBank Nucleotide #	NM_080792.2
UniProt Accession #	P78324; O00683; O43799; Q8N517; Q8TAL8; Q9H0Z2; Q9UDX2; Q9UIJ6; Q9Y4U9; A2A2E1; A8K411
Molecular Weight	54,967 Da
NCBI Official Full Name	tyrosine-protein phosphatase non-receptor type substrate 1
NCBI Official Synonym Full Names	signal-regulatory protein alpha
NCBI Official Symbol	SIRPA
NCBI Official Synonym Symbols	BIT; MFR; P84; SIRP; MYD-1; SHPS1; CD172A; PTPNS1

NCBI Protein Information	tyrosine-protein phosphatase non-receptor type substrate 1; myd-1 antigen; OTTHUMP00000030001; OTTHUMP00000159968; OTTHUMP00000159969; inhibitory receptor SHPS-1; macrophage fusion receptor; CD172 antigen-like family member A; tyrosine phosphatase SHP sub
UniProt Protein Name	Tyrosine-protein phosphatase non-receptor type substrate 1
UniProt Gene Name	SIRPA
UniProt Synonym Gene Names	BIT; MFR; MYD1; PTPNS1; SHPS1; SIRP; SHP substrate 1; SHPS-1; Bit; Sirp-alpha-1; Sirp-alpha-2
UniProt Entry Name	SHPS1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/hek293-sirpa-active-protein/sirp-alpha/257985>