# abcam

### Product datasheet

## Anti-SIRP alpha antibody ab53721

★★★★★ 1 Abreviews 6 References 3 Images

#### Overview

Product name Anti-SIRP alpha antibody

**Description** Rabbit polyclonal to SIRP alpha

Host species Rabbit

**Specificity** Detects endogenous levels of total Sirp alpha1 protein.

Tested applications Suitable for: WB, IHC-P, ICC/IF

Species reactivity Reacts with: Human

**Immunogen** Synthetic peptide corresponding to Human SIRP alpha aa 480-496.

Sequence:

CRTPKQPAPKPEPSFSEY

Database link: P78324

(Peptide available as ab156313)

Run BLAST with
Run BLAST with

**General notes**The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**Properties** 

Form Liquid

**Storage instructions** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

**Storage buffer** pH: 7

Preservative: 0.02% Sodium azide

Constituents: 50% Glycerol, 0.87% Sodium chloride, PBS

Without Mg+2 and Ca+2

**Purity** Immunogen affinity purified

1

**Clonality** Polyclonal

**Isotype** IgG

#### **Applications**

#### The Abpromise guarantee

Our  $\underline{\textbf{Abpromise guarantee}}$  covers the use of ab53721 in the following tested applications.

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

Application	Abreviews	Notes
WB	****(1)	1/500 - 1/1000. Detects a band of approximately 56 kDa (predicted molecular weight: 56 kDa).
IHC-P		1/50 - 1/100.
ICC/IF		Use a concentration of 5 µg/ml.

#### **Target**

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 lg-like C1-type (immunoglobulin-like) domains.

Contains 1 lg-like V-type (immunoglobulin-like) domain.

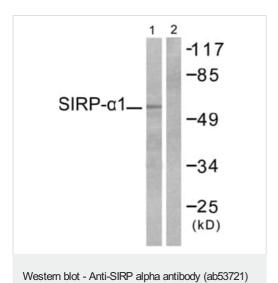
Post-translational N-glycosylated.

modifications Phosphorylated on tyrosine residues in response to stimulation with EGF, growth hormone, insulin

and PDGF. Dephosphorylated by PTPN11.

Cellular localization Membrane.

#### **Images**

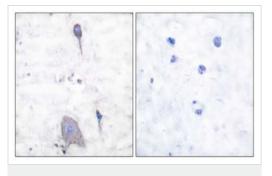


All lanes: Anti-SIRP alpha antibody (ab53721) at 1/500 dilution

Lane 1: Extracts from HepG2 cells

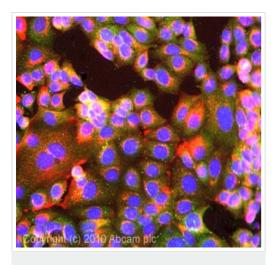
Lane 2: Extracts from HepG2 cells with immunizing peptide

**Predicted band size:** 56 kDa **Observed band size:** 56 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SIRP alpha antibody (ab53721)

Ab53721 at 1/50 dilution, staining paraffin embedded human brain, in the presence (right) and absence (left) of blocking peptide.



Immunocytochemistry/ Immunofluorescence - Anti-SIRP alpha antibody (ab53721)

ICC/IF image of ab53721 stained Mcf7 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab53721, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit lgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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

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