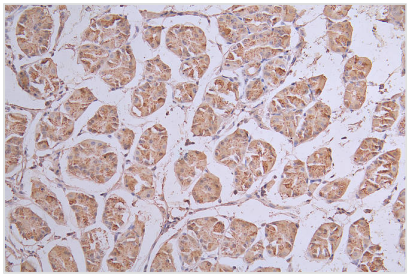
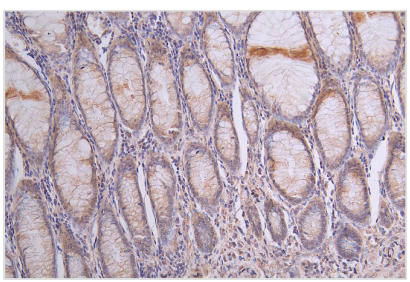
SIRPA Recombinant Monoclonal Antibody

Product Code	CSB-RA443117A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P78324
Immunogen	A synthesized peptide derived from Human SIRPA
Species Reactivity	Human
Tested Applications	ELISA, IHC, FC; Recommended dilution: IHC:1:50-1:200, FC:1:50-1:200
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Neuroscience;Cardiovascular;Signal transduction
Gene Names	SIRPA
Clone No.	3C3

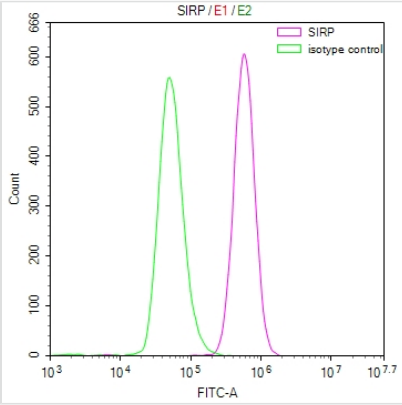
Image



IHC image of CSB-RA443117A0HU diluted at 1:50 and staining in paraffin-embedded human stomach tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.13% DAB.



IHC image of CSB-RA443117A0HU diluted at 1:50 and staining in paraffin-embedded human rectal cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.13% DAB.



Overlay Peak curve showing U937 cells surface stained with CSB-RA443117A0HU (red line) at 1:50. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1μg/1*10^{6}cells) for 45min at 4?. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4?.Control antibody (green line) was rabbit IgG (1μg/1*10^{6}cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

The SIRPA recombinant monoclonal antibody synthesis starts with the extraction of SIRPA antibody genes from B cells that are isolated from immunoreactive rabbits. These genes undergo amplification and are cloned into suitable phage vectors, which are subsequently introduced into mammalian cell lines to facilitate the production of functional antibodies. The resulting SIRPA recombinant monoclonal antibody is purified from the culture supernatant of the transfected cell lines through affinity chromatography. After rigorous verification, the antibody can be used in ELISA, IHC, and FC applications to detect the human SIRPA protein.

SIRPA is a protein that regulates immune responses and phagocytosis by interacting with CD47 and other ligands. Its main function is to prevent the unnecessary phagocytosis of healthy cells while facilitating the clearance of pathogens and damaged cells by immune cells. SIRPA's role in immune regulation has implications for both normal immune function and potential therapeutic strategies for cancer and other diseases.