abcam

ab245733

Anti-SPARC antibody [SP205] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	SP205
Purification technique	Affinity purification Protein A/G
Concentration	0.997 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from TCS by protein A/G.

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-

Notes	Primary incubation for 10 minutes at room temperature. Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Predicted

Species	Rabbit, Cow, Pig
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Rabbit, Cow, Pig
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	Primary incubation for 1 hour at room temperature.

Not recommended

Species	Mouse
Dilution info	-
Notes	Primary incubation for 1 hour at room temperature.

Species	Rat
Dilution info	-
Notes	Primary incubation for 1 hour at room temperature.

Species	Rabbit
Dilution info	-
Notes	-

Species	Cow
Dilution info	-
Notes	-

Species	Pig
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Rabbit, Cow, Pig
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information SPARC

Function	Appears to regulate cell growth through interactions with the extracellular matrix and cytokines. Binds calcium and copper, several types of collagen, albumin, thrombospondin, PDGF and cell membranes. There are two calcium binding sites; an acidic domain that binds 5 to 8 Ca(2+) with a low affinity and an EF-hand loop that binds a Ca(2+) ion with a high affinity.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab245733 is the carrier-free version of ab225716.

Patented technology

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	SPARC also known as Secreted Protein Acidic and Rich in Cysteine or osteonectin is a glycoprotein with a molecular mass of approximately 32 to 43 kDa. It is widely expressed in various tissues notably within the bone skin and extracellular matrix. SPARC influences cell-matrix interactions and modulates cellular functions such as proliferation and migration. The protein plays a role in tissue remodeling and wound healing by interacting with structural components of the matrix and regulating cell adhesion.
Biological function summary	SPARC impacts processes related to cell communication and matrix dynamics. It does not form part of large complexes but functions through interactions with matrix molecules and receptors. SPARC regulates collagen fibrillogenesis and influences the bioavailability of growth factors. It further affects angiogenesis through its ability to alter cellular adhesion and spreading which impacts vascular development and repair processes.
Pathways	SPARC integrates into regulatory cascades such as the WNT signaling and TGF-β pathways. These pathways are essential for cellular growth repair and differentiation. In the context of the TGF-β signaling pathway SPARC modulates interactions with proteins like integrins and collagens impacting fibrotic processes and matrix assembly.
Associated diseases and disorders	Alterations in SPARC expression show associations with cancer and fibrosis. The protein functions in tumor progression where it can influence tumor cell interactions with the stroma and affect cell migration and invasion. Furthermore in fibrotic diseases SPARC regulates the deposition and organization of collagen contributing to tissue stiffening. Connections are evident between SPARC and

other matrix proteins like fibronectin known for their roles in these pathological conditions.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

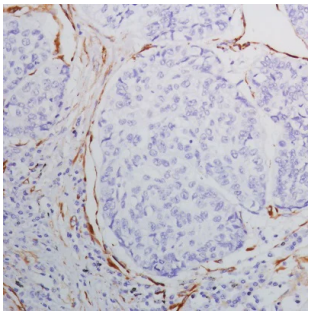
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

13 product images

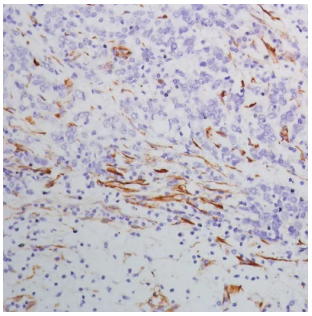


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SPARC antibody [SP205] - BSA and Azide free (ab245733)

SPARC Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-SPARC antibody

Formalin-fixed, paraffin-embedded human pancreatic adenocarcinoma tissue stained for SPARC using ab225716 at 1/100 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS#44; BSA#44; and sodium azide (ab225716)

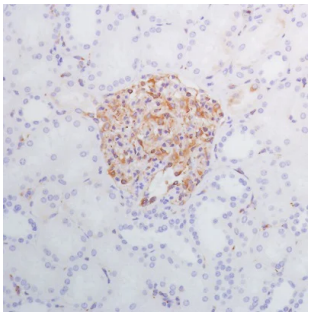


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SPARC antibody [SP205] - BSA and Azide free (ab245733)

SPARC Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-SPARC antibody

Formalin-fixed, paraffin-embedded human cerebellum tissue stained for SPARC using ab225716 at 1/100 dilution in immunohistochemical analysis.

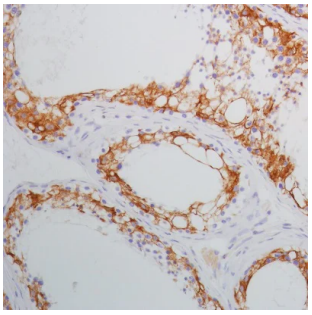
This data was developed using the same antibody clone in a different buffer formulation containing PBS#44; BSA#44; and sodium azide (ab225716)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SPARC antibody [SP205] - BSA and Azide free (ab245733)

SPARC Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-SPARC antibody

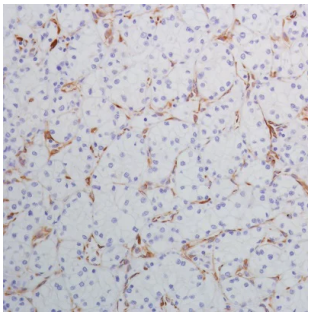
Formalin-fixed, paraffin-embedded human kidney tissue stained for SPARC using ab225716 at 1/100 dilution in immunohistochemical analysis.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab225716).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SPARC antibody [SP205] - BSA and Azide free (ab245733)

SPARC Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-SPARC antibody

Formalin-fixed, paraffin-embedded human testis tissue stained for SPARC using ab225716 at 1/100 dilution in immunohistochemical analysis.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab225716).

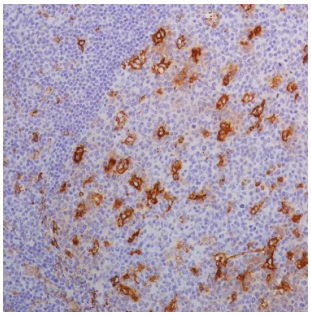


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SPARC antibody [SP205] - BSA and Azide free (ab245733)

SPARC Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-SPARC antibody

Formalin-fixed, paraffin-embedded human placenta tissue stained for SPARC using ab225716 at 1/100 dilution in immunohistochemical analysis.

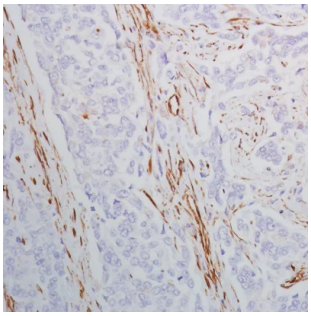
This data was developed using the same antibody clone in a different buffer formulation containing PBS#44; BSA#44; and sodium azide (ab225716)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SPARC antibody [SP205] - BSA and Azide free (ab245733)

SPARC Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-SPARC antibody

Formalin-fixed, paraffin-embedded human tonsil tissue stained for SPARC using ab225716 at 1/100 dilution in immunohistochemical analysis.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab225716).

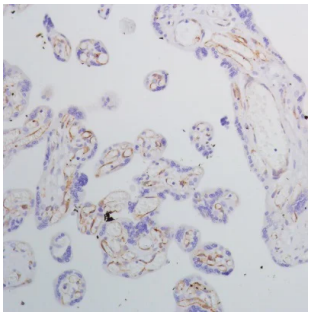


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SPARC antibody [SP205] - BSA and Azide free (ab245733)

SPARC Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-SPARC antibody

Formalin-fixed, paraffin-embedded human tonsil tissue stained for SPARC using ab225716 at 1/100 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS#44; BSA#44; and sodium azide (ab225716)

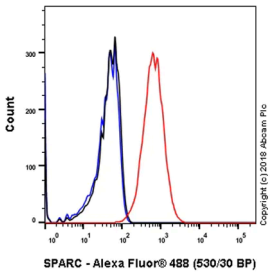


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SPARC antibody [SP205] - BSA and Azide free (ab245733)

SPARC Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-SPARC antibody

Formalin-fixed, paraffin-embedded human renal cell carcinoma tissue stained for SPARC using ab225716 at 1/100 dilution in immunohistochemical analysis.

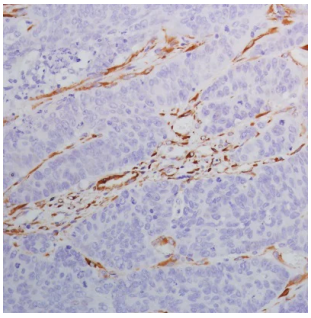
This data was developed using the same antibody clone in a different buffer formulation containing PBS#44; BSA#44; and sodium azide (ab225716)



Flow Cytometry (Intracellular) - Anti-SPARC antibody [SP205] - BSA and Azide free (ab245733)

SPARC Flow Cytometry (Intracellular) staining using rabbit Anti-SPARC antibody

Flow Cytometry analysis of A375(Human malignant melanoma epithelial cell) cells labeling SPARC with purified ab225716 at 1:200 dilution (0.595 µg/ml) Red. Cells were fixed with 4% paraformaldehyde . A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) secondary antibody was used at 1:2000 dilution. Isotype control - Rabbit monoclonal IgG (ab172730) / Black. Unlabeled control - Unlabelled cells / Blue.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227675).

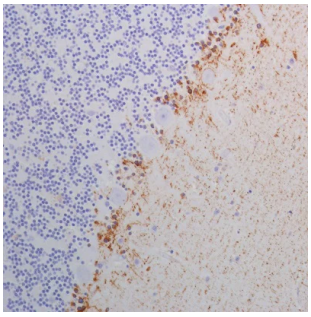


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SPARC antibody [SP205] - BSA and Azide free (ab245733)

SPARC Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-SPARC antibody

Formalin-fixed, paraffin-embedded human testis tissue stained for SPARC using ab225716 at 1/100 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS#44; BSA#44; and sodium azide (ab225716)

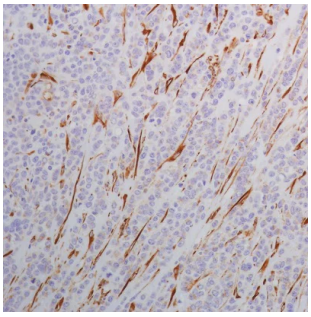


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SPARC antibody [SP205] - BSA and Azide free (ab245733)

SPARC Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-SPARC antibody

Formalin-fixed, paraffin-embedded human stomach adenocarcinoma tissue stained for SPARC using ab225716 at 1/100 dilution in immunohistochemical analysis.

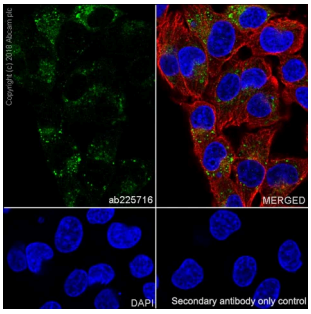
This data was developed using the same antibody clone in a different buffer formulation containing PBS#44; BSA#44; and sodium azide (ab225716)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SPARC antibody [SP205] - BSA and Azide free (ab245733)

SPARC Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-SPARC antibody

Formalin-fixed, paraffin-embedded human pancreatic adenocarcinoma tissue stained for SPARC using ab225716 at 1/100 dilution in immunohistochemical analysis.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA and sodium azide (ab225716).



Immunocytochemistry/ Immunofluorescence - Anti-SPARC antibody [SP205] - BSA and Azide free (ab245733)

SPARC Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-SPARC antibody

Immunocytochemistry/ Immunofluorescence analysis of A375 (human malignant melanoma epithelial cell) cells labeling SPARC with purified ab225716 at 1:15 (7.9 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227675).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.