abcam

ab326573

Anti-Tspan-8 antibody [EPR28888-508] - BSA and Azide free

Recombinant | RabMAb | Advanced Validation

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	EPR28888-508
Purification technique	Affinity purification Protein A
Specificity	This antibody does not cross-react with recombinant human Tspan-1 or Tspan-9 by ELISA.
Concentration	0.968 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

I-ELISA

Tested

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	-
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Not recommended

Species	Recombinant fragment - Human

Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

mIHC

Tested

Species	Human
Dilution info	-
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Not recommended

Species	Recombinant fragment - Human
Dilution info	-
Notes	-

Target data

See full target information TSPAN8

Function	Structural component of specialized membrane microdomains known as tetraspanin-enriched microdomains (TERMs), which act as platforms for receptor

clustering and signaling (PubMed:27180357, PubMed:36078095). Participates thereby in diverse biological functions such as cell signal transduction, migration and protein trafficking (PubMed:25761241). Promotes ADAM17-mediated TNF processing through recruitment of ADAM17 to tetraspanin-enriched micro-domains (TEMs) (PubMed:36078095). Forms a complex with RICTOR and integrin alpha3/ITGA3 to mediate mTORC2 activation and AKT1 phosphorylation leading to cell migration (PubMed:25761241). Reduces apoptosis and autophagy induced by high glucose levels through forming a complex with mTOR and RICTOR (PubMed:35904232). Contributes to the maintenance of intestinal epithelial barrier and plays a role in the regulation of intestine inflammation by switching interferon gamma receptor 1/IFNGR1 from clathrin-dependent to lipid raft-dependent endocytosis route to limit STAT1 activation magnitude and duration (PubMed:37204469). Acts as a modulator of the endothelin axis by associating with endothelin converting enzyme ECE1 and regulating its activity of conversion of the endothelin-1 precursor to endothelin (PubMed:37835445).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

ab326573 is the carrier-free version of ab326570

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.

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

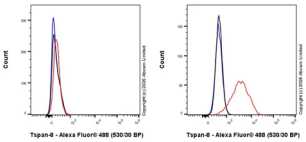
We do not recommend this combination. It is not covered by our product promise.

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



Flow Cytometry - Anti-Tspan-8 antibody [EPR28888-508] - BSA and Azide free (ab326573)

Tspan-8 Flow Cytometry staining of LS513 (human Large intestine Cecum epithelial cell, Right) using rabbit Anti-Tspan-8 antibody

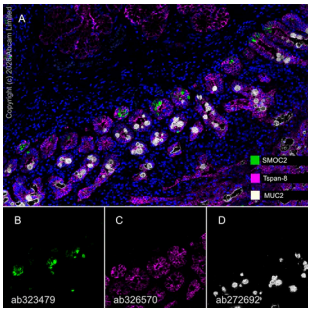
This data was developed using ab326570, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of LS513 (human Large intestine Cecum epithelial cell, Right) Daudi (human Burkitt's lymphoma lymphoblast, Left) cells labelling Tspan-8 with ab326570 at 1/50 dilution (1ug) / Red compared with a Rabbit monoclonal IgG (ab172730) / Black isotype control

and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.

Gated on viable cells. Low expression: Daudi.



Multiplex immunohistochemistry - Anti-Tspan-8 antibody [EPR28888-508] - BSA and Azide free (ab326573)

Tspan-8 Multiplex immunohistochemistry staining of Human small intestine using rabbit Anti-Tspan-8 antibody

This data was developed using ab326570, the same antibody clone in a different buffer formulation.
Multiplex immunohistochemistry analysis of formalin/PFA-fixed paraffin-embedded human small intestine tissue staining SMOC2 with ab323479 at a 1/100 dilution (4.86 µg/ml), ab326570 anti-Tspan-8 at a 1/100 dilution (4.84 µg/ml) and ab272692 anti-MUC2 at a 1/2000 dilution (0.253 µg/ml).

Panel A: merged staining of anti-SMOC2 (green; Opal™520), anti-Tspan-8 (magenta; Opal™690) and anti-MUC2 (gray; Opal™570) on human small intestine.

Panel B: anti-SMOC2 staining stem cells in human small intestine.

Panel C: anti-Tspan-8 staining epithelium in human small intestine.

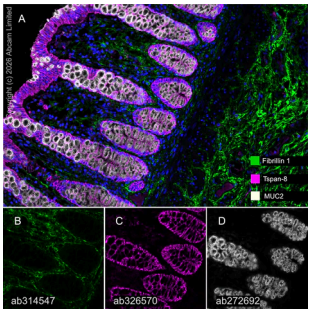
Panel D: anti-MUC2 staining goblet cells in human small intestine.

Nuclear DNA was labeled with DAPI (shown in blue).

The section was incubated in three rounds of staining: in the order of ab323479, ab326570 and ab272692 for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit using Opal Polymer HRP Ms + Rb secondary reagent. Image acquisition was performed with a confocal microscope (Leica-Microsystems, STELLARIS).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Multiplex immunohistochemistry - Anti-Tspan-8 antibody [EPR28888-508] - BSA and Azide free (ab326573)

Tspan-8 Multiplex immunohistochemistry staining of Human colon using rabbit Anti-Tspan-8 antibody

This data was developed using ab326570, the same antibody clone in a different buffer formulation.
Multiplex immunohistochemistry analysis of formalin/PFA-fixed paraffin-embedded human colon tissue staining Fibrillin 1 with ab314547 at a 1/100 dilution (5.02 µg/ml), ab326570 anti-Tspan-8 used at a 1/100 dilution (4.84 µg/ml) and ab272692 anti-MUC2 used at a 1/2000 dilution (0.253 µg/ml).

Panel A: merged staining of anti-Fibrillin 1 (green; Opal™520), anti-Tspan-8 (magenta; Opal™690) and anti-MUC2 (gray; Opal™570) on human colon.

Panel B: anti-Fibrillin 1 staining extracellular microfibrils in human colon.

Panel C: anti-Tspan-8 staining epithelium in human colon.

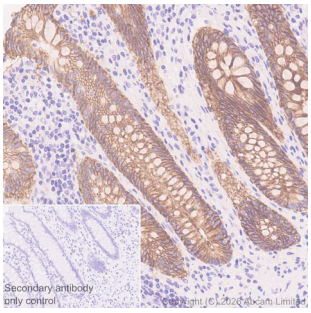
Panel D: anti-MUC2 staining goblet cells in human colon.

Nuclear DNA was labeled with DAPI (shown in blue).

The section was incubated in three rounds of staining: in the order of ab314547, ab326570 and ab272692 for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit using Opal Polymer HRP Ms + Rb secondary reagent. Image acquisition was performed with Leica SP8 confocal microscope.

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tspan-8 antibody [EPR28888-508] - BSA and Azide free (ab326573)

Tspan-8 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human epityphlon using rabbit Anti-Tspan-8 antibody

This data was developed using ab326570, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Human epityphlon tissue labeling Tspan-8 with ab326570 at 1/100 (4.84 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

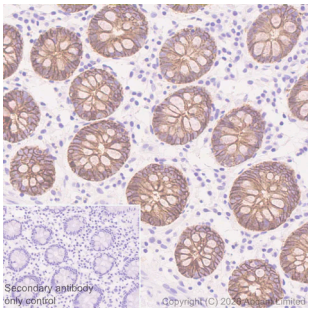
Positive staining on human epityphlon. The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tspan-8 antibody [EPR28888-508] - BSA and Azide free (ab326573)

Tspan-8 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human colon using rabbit Anti-Tspan-8 antibody

This data was developed using ab326570, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling Tspan-8 with ab326570 at 1/100 (4.84 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

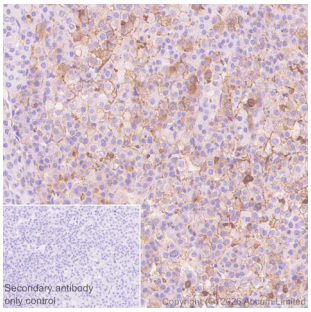
Positive staining on human colon. The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tspan-8 antibody [EPR28888-508] - BSA and Azide free (ab326573)

Tspan-8 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human liver carcinoma using rabbit Anti-Tspan-8 antibody

This data was developed using ab326570, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Human liver carcinoma tissue labeling Tspan-8 with ab326570 at 1/100 (4.84 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

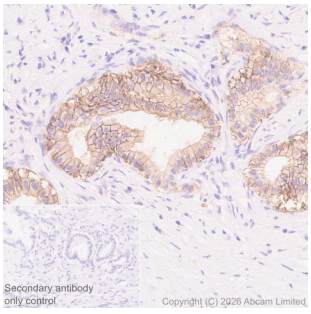
Positive staining on human liver carcinoma. The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tspan-8 antibody [EPR28888-508] - BSA and Azide free (ab326573)

Tspan-8 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human pancreatic carcinoma using rabbit Anti-Tspan-8 antibody

This data was developed using ab326570, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Human pancreatic carcinoma tissue labeling Tspan-8 with ab326570 at 1/100 (4.84 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

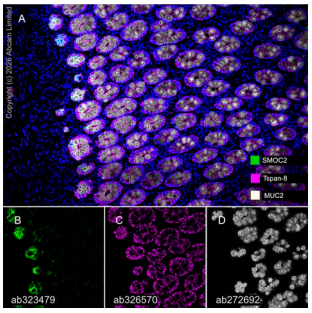
Positive staining on human pancreatic carcinoma. The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Multiplex immunohistochemistry - Anti-Tspan-8 antibody [EPR28888-508] - BSA and Azide free (ab326573)

Tspan-8 Multiplex immunohistochemistry staining of Human colon using rabbit Anti-Tspan-8 antibody

This data was developed using ab326570, the same antibody clone in a different buffer formulation.
Multiplex immunohistochemistry analysis of formalin/PFA-fixed paraffin-embedded human colon tissue staining SMOC2 with ab323479 at a 1/100 dilution (4.86 µg/ml), ab326570 anti-Tspan-8 at a 1/100 dilution (4.84 µg/ml) and ab272692 anti-MUC2 at a 1/2000 dilution (0.253 µg/ml).

Panel A: merged staining of anti-SMOC2 (green; Opal™520), anti-Tspan-8 (magenta; Opal™690) and anti-MUC2 (gray; Opal™570) on human colon.

Panel B: anti-SMOC2 staining stem cells in human colon.

Panel C: anti-Tspan-8 staining epithelium in human colon.

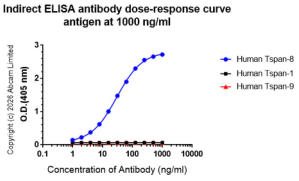
Panel D: anti-MUC2 staining goblet cells in human colon.

Nuclear DNA was labeled with DAPI (shown in blue).

The section was incubated in three rounds of staining: in the order of ab323479, ab326570 and ab272692 for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit using Opal Polymer HRP Ms + Rb secondary reagent. Image acquisition was performed with a Leica STELLARIS confocal microscope.

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Indirect ELISA - Anti-Tspan-8 antibody [EPR28888-508] - BSA and Azide free (ab326573)

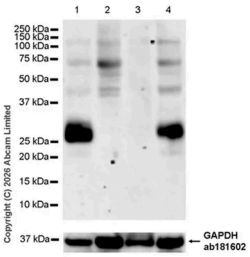
This data was developed using ab326570, the same antibody clone in a different buffer formulation.

Indirect ELISA analysis of ab326570 at 1000-0 ng/ml. The Secondary antibody used was Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) at 1:2500 dilution dilution.

Antigen: Human Tspan-8 (extracellular domain fragment);Human Tspan-1 (extracellular domain fragment);Human Tspan-9 (extracellular domain fragment).

Antigen concentration: 1000 ng/ml

This antibody does not cross-react with recombinant human Tspan-1 or Tspan-9 by ELISA.



Western blot - Anti-Tspan-8 antibody [EPR28888-508] - BSA and Azide free (ab326573)

Tspan-8 Western blot staining using rabbit Anti-Tspan-8 antibody

This data was developed using ab326570, the same antibody clone in a different buffer formulation.

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Negative control: human skeletal muscle, human spleen.

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) (1:200000) (36KDa).

All lanes:
Western blot - Anti-Tspan-8 antibody [EPR28888-508] (ab326570) at 1/1000 dilution

Lane 1:
Human stomach tissue lysate at 30 µg

Lane 2:
Human skeletal muscle tissue lysate at 30 µg

Lane 3:
Human spleen tissue lysate at 30 µg

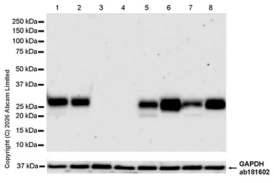
Lane 4:
Human colon tissue lysate at 30 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Observed band size: 26 kDa, 36 kDa

Exposure time: 180s



Western blot - Anti-Tspan-8 antibody [EPR28888-508] - BSA and Azide free (ab326573)

Tspan-8 Western blot staining using rabbit Anti-Tspan-8 antibody

This data was developed using ab326570, the same antibody clone in a different buffer formulation.

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Negative control: Daudi, MCF7.

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) (1:200000) (36KDa).

All lanes:
Western blot - Anti-Tspan-8 antibody [EPR28888-508] (ab326570) at 1/1000 dilution

Lane 1:
AsPC-1 (human Pancreas epithelial cell) whole cell lysate at 20 µg

Lane 2:
LS513 (human Large intestine, Cecum epithelial cell) whole cell lysate at 20 µg

Lane 3:
Daudi (human burkitt's lymphoma lymphoblast) whole cell lysate at 20 µg

Lane 4:
MCF7 (human breast adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Lane 5:
SW1463 (human Large intestine, Rectum epithelial cell) whole cell lysate at 20 µg

Lane 6:
HT115 (human colon epithelial cell) whole cell lysate at 20 µg

Lane 7:
LoVo (human colorectal adenocarcinoma epithelial cell) whole cell lysate at 20 µg

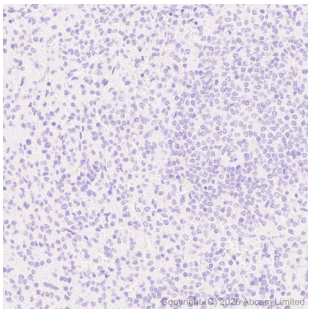
Lane 8:
SW1116 (human colorectal adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 26 kDa, 36 kDa

Exposure time: 180s



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tspan-8 antibody [EPR28888-508] - BSA and Azide free (ab326573)

Tspan-8 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human spleen using rabbit Anti-Tspan-8 antibody

This data was developed using ab326570, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Human spleen tissue labeling Tspan-8 with ab326570 at 1/100 (4.84 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

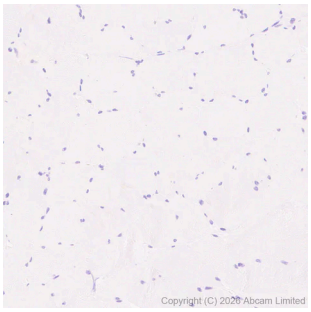
Negative control: no staining on human spleen. The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tspan-8 antibody [EPR28888-508] - BSA and Azide free (ab326573)

Tspan-8 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human skeletal muscle using rabbit Anti-Tspan-8 antibody

This data was developed using ab326570, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of paraffin-embedded Human skeletal muscle tissue labeling Tspan-8 with ab326570 at 1/100 (4.84 µg/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Negative control: no staining on human skeletal muscle. The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins

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