

Product datasheet

Anti-Prohibitin antibody [EP2803Y] ab75766

Recombinant RabMAb

★★★★★ [1 Abreviews](#) [19 References](#) [23 Images](#)

Overview

Product name	Anti-Prohibitin antibody [EP2803Y]
Description	Rabbit monoclonal [EP2803Y] to Prohibitin
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), ICC/IF, WB, IP, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: NIH/3T3, MCF7, A431, HEK-293, HEK-293T and Ramos cell lysates; Mouse kidney lysate; Rat brain lysate. IP: HEK-293 whole cell lysate. IHC-P: Human kidney, liver, placenta, breast carcinoma and hepatocellular carcinoma tissues; Mouse kidney, stomach and liver tissues; Rat kidney, stomach and liver tissues. ICC/IF: NIH/3T3 cells; HeLa cells. Flow Cyt (intra): HepG2 and A431 cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.12% BSA
Purity	Protein A purified
Clonality	Monoclonal

Clone number EP2803Y
Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab75766 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
Flow Cyt (Intra)		1/120. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. Unpurified format: 1/1000
ICC/IF		1/100.
WB		1/10000 - 1/20000. Detects a band of approximately 30 kDa (predicted molecular weight: 30 kDa).
IP		1/40.
IHC-P		1/100 - 1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Target

Function Prohibitin inhibits DNA synthesis. It has a role in regulating proliferation. As yet it is unclear if the protein or the mRNA exhibits this effect. May play a role in regulating mitochondrial respiration activity and in aging.

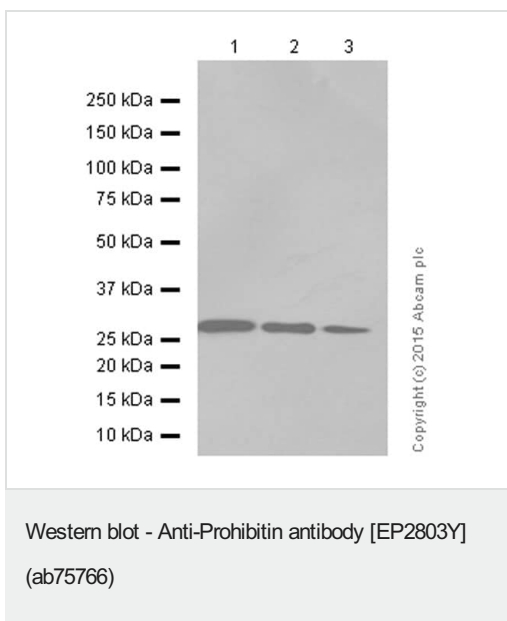
Tissue specificity Widely expressed in different tissues.

Sequence similarities Belongs to the prohibitin family.

Developmental stage Levels of expression in fibroblasts decrease heterogeneously during cellular aging.

Cellular localization Mitochondrion inner membrane.

Images



All lanes : Anti-Prohibitin antibody [EP2803Y] (ab75766) at 1/20000 dilution

Lane 1 : NIH/3T3 (mouse embryo fibroblast cell line) whole cell lysates

Lane 2 : Mouse kidney tissue lysates

Lane 3 : Rat brain tissue lysates

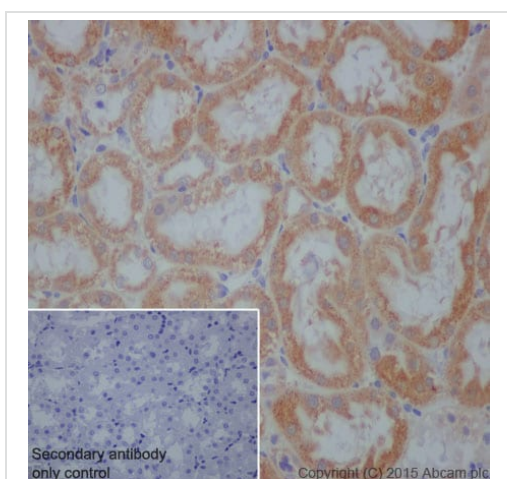
Lysates/proteins at 20 µg per lane.

Secondary

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

Predicted band size: 30 kDa

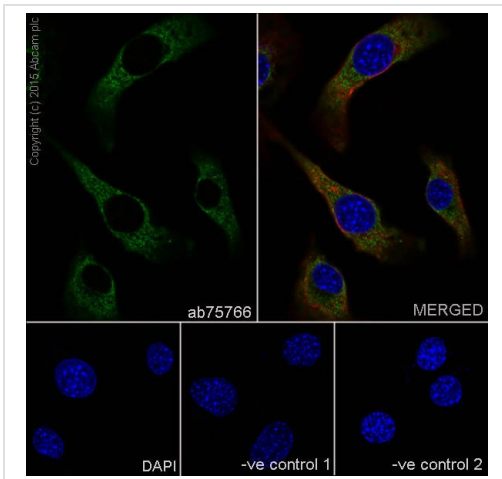
Additional bands at: 30 kDa. We are unsure as to the identity of these extra bands.



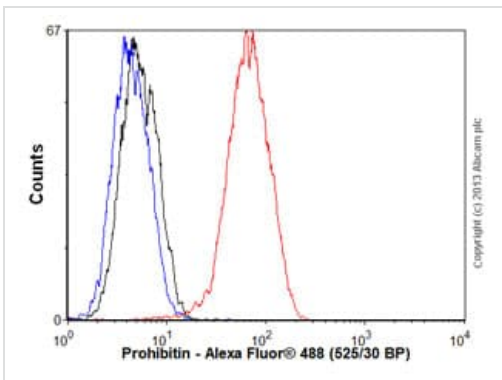
ab75766 staining Prohibitin in rat kidney tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/500. A goat anti-rabbit IgG H&L (HRP) [ab97051](#) was used as the secondary antibody.

Negative control 1: PBS in place of primary antibody.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prohibitin antibody [EP2803Y] (ab75766)



Immunocytochemistry/ Immunofluorescence - Anti-Prohibitin antibody [EP2803Y] (ab75766)



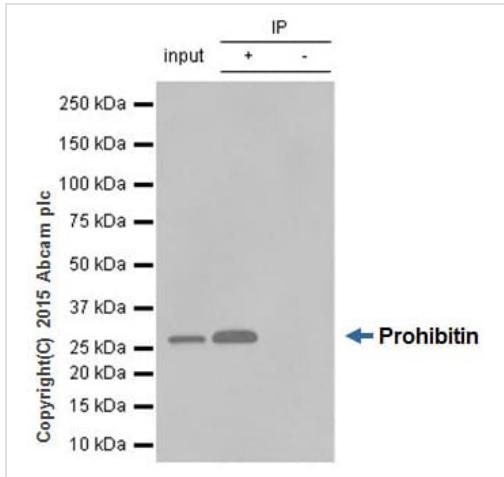
Flow Cytometry (Intracellular) - Anti-Prohibitin antibody [EP2803Y] (ab75766)

ab75766 staining Prohibitin in NIH/3T3 (mouse embryo fibroblast cell line) cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% Triton X-100. Samples were incubated with primary antibody at a dilution of 1/100. A goat anti rabbit IgG (Alexa Fluor® 488) (**ab150077**) was used as the secondary antibody. **ab7291** (1/1000) and **ab150120** (1/1000) were used as counterstains for primary antibody ab75766 and secondary antibody **ab150077** respectively and DAPI was used as a nuclear counterstain.

Negative control 1: Rabbit primary antibody and anti-mouse secondary antibody (**ab150120**)

Negative control 2: Mouse primary antibody (**ab7291**) and anti-rabbit secondary antibody (**ab150077**)

Overlay histogram showing HepG2 (human liver hepatocellular carcinoma cell line) cells stained with ab75766 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab75766, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (**ab150077**) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in HepG2 cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



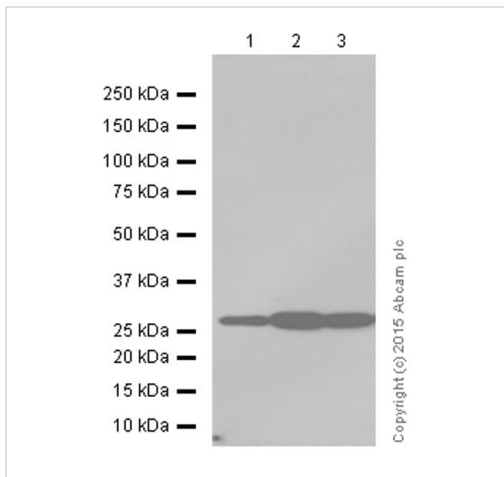
Immunoprecipitation - Anti-Prohibitin antibody
[EP2803Y] (ab75766)

ab75766 immunoprecipitating Prohibitin. 10µg of cell lysate was incubated with primary antibody at a dilution of 1/40 and VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) at a dilution of 1/10000.

Lane 1: HEK-293 (human epithelial cell line from embryonic kidney) whole cell lysate (10ug)

Lane 2: HEK-293 whole cell lysate

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab75766 in HEK-293 whole cell lysate



Western blot - Anti-Prohibitin antibody [EP2803Y]
(ab75766)

All lanes : Anti-Prohibitin antibody [EP2803Y] (ab75766) at 1/20000 dilution

Lane 1 : MCF7 (human breast adenocarcinoma cell line) whole cell lysates

Lane 2 : A431 (human epidermoid carcinoma cell line) whole cell lysates

Lane 3 : HEK-293 (human epithelial cell line from embryonic kidney) whole cell lysates

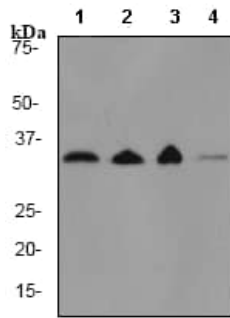
Lysates/proteins at 20 µg per lane.

Secondary

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

Predicted band size: 30 kDa

Additional bands at: 30 kDa. We are unsure as to the identity of these extra bands.



Western blot - Anti-Prohibitin antibody [EP2803Y] (ab75766)

All lanes : Anti-Prohibitin antibody [EP2803Y] (ab75766) at 1/20000 dilution

Lane 1 : MCF7 (human breast adenocarcinoma cell line) cell lysate

Lane 2 : A431 (human epidermoid carcinoma cell line) cell lysate

Lane 3 : HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) cell lysate

Lane 4 : Ramos (human Burkitt's lymphoma cell line) cell lysate

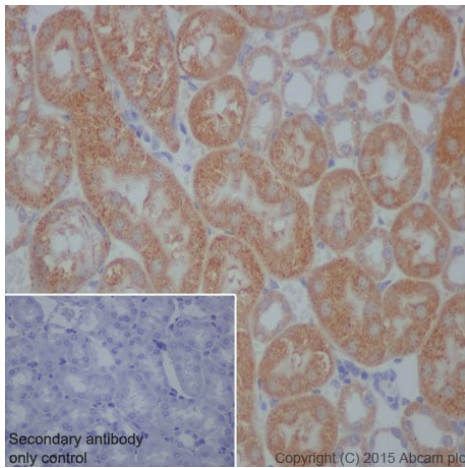
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 30 kDa

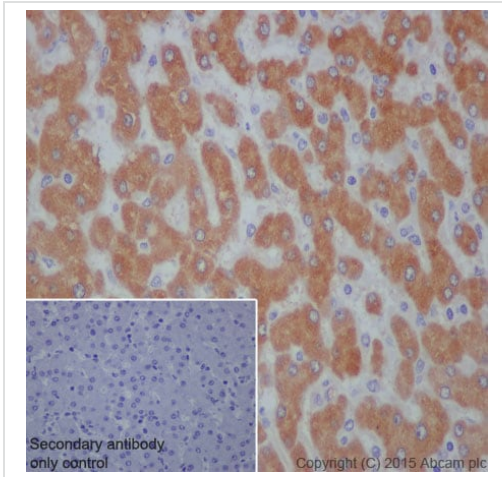
Observed band size: 30 kDa



ab75766 staining Prohibitin in mouse kidney tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/500. A goat anti-rabbit IgG H&L (HRP) **ab97051** was used as the secondary antibody.

Negative control 1: PBS in place of primary antibody.

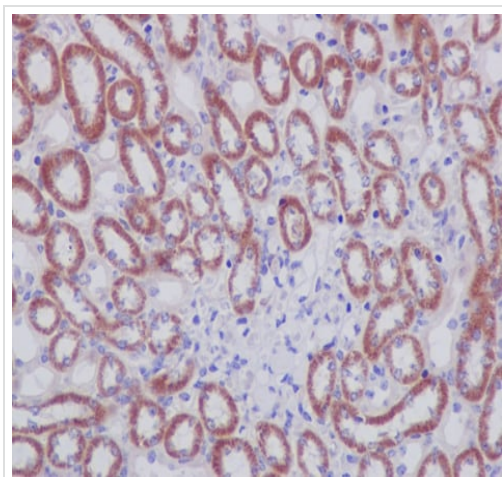
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prohibitin antibody [EP2803Y] (ab75766)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prohibitin antibody [EP2803Y] (ab75766)

ab75766 staining Prohibitin in human liver tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/500. A goat anti-rabbit IgG H&L (HRP) **ab97051** was used as the secondary antibody.

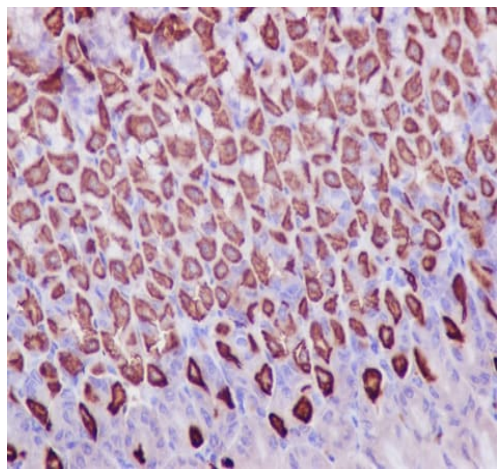
Negative control 1: PBS in place of primary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prohibitin antibody [EP2803Y] (ab75766)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse kidney tissue labelling Prohibitin with ab75766 at 1/250.

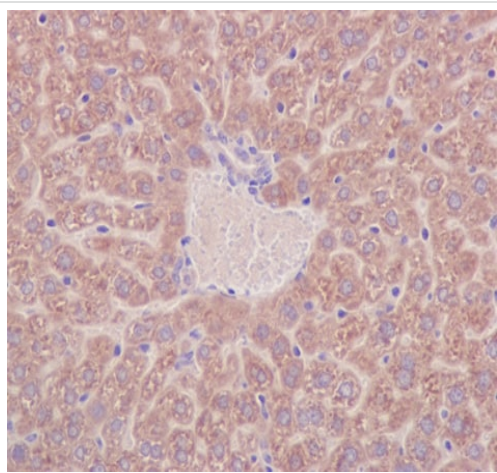
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prohibitin antibody [EP2803Y] (ab75766)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse stomach tissue labelling Prohibitin with ab75766 at 1/250.

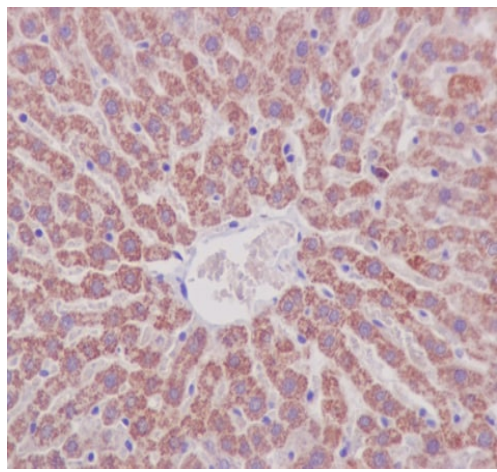
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prohibitin antibody [EP2803Y] (ab75766)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse liver tissue labelling Prohibitin with ab75766 at 1/250.

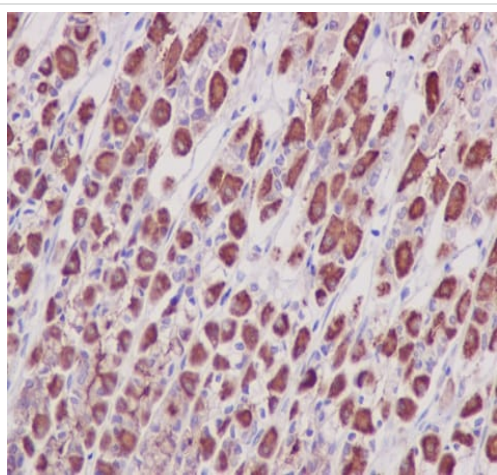
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prohibitin antibody [EP2803Y] (ab75766)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat liver tissue labelling Prohibitin with ab75766 at 1/250.

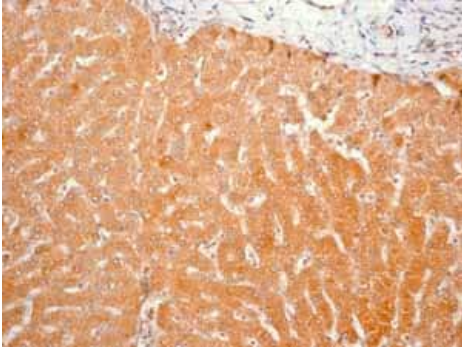
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prohibitin antibody [EP2803Y] (ab75766)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat stomach tissue labelling Prohibitin with ab75766 at 1/250.

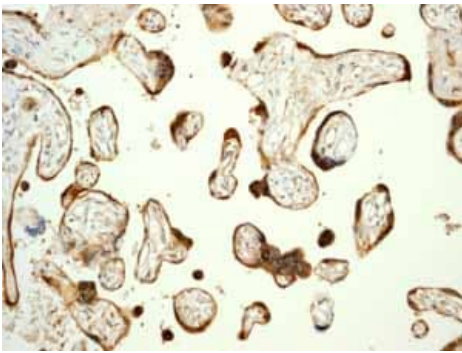
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prohibitin antibody [EP2803Y] (ab75766)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of normal liver tissue labelling Prohibitin with ab75766.

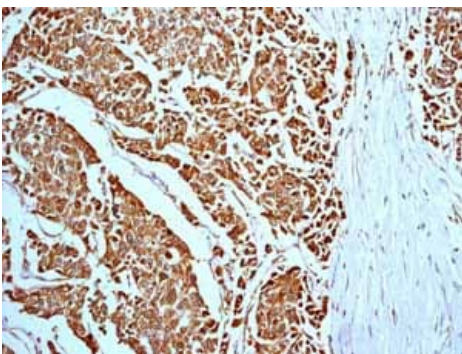
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prohibitin antibody [EP2803Y] (ab75766)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of normal placenta tissue labelling Prohibitin with ab75766.

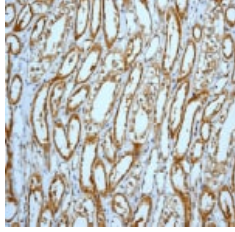
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prohibitin antibody [EP2803Y] (ab75766)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of breast carcinoma tissue labelling Prohibitin with ab75766.

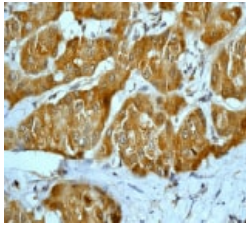
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prohibitin antibody [EP2803Y] (ab75766)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue labelling Prohibitin with ab75766 at 1/250.

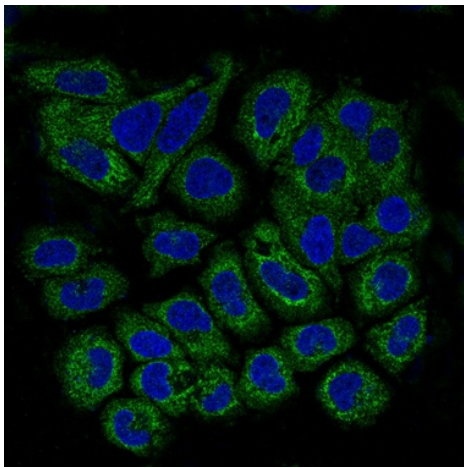
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prohibitin antibody [EP2803Y] (ab75766)

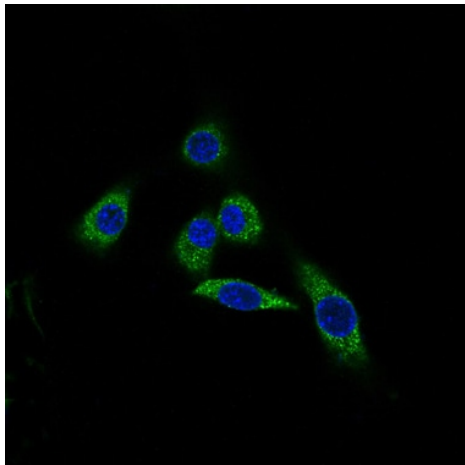
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human hepatocellular tissue labelling Prohibitin with ab75766 at 1/250.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



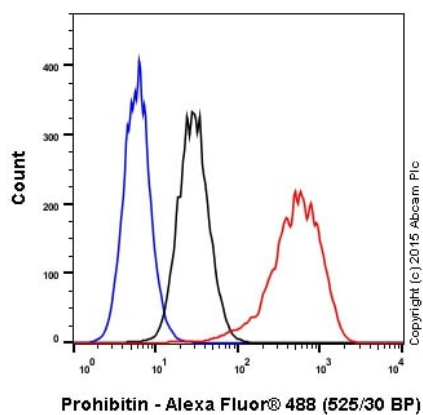
Immunocytochemistry/ Immunofluorescence - Anti-Prohibitin antibody [EP2803Y] (ab75766)

Immunocytochemistry/Immunofluorescence analysis of HeLa (human epithelial cell line from cervix adenocarcinoma) cells labelling Prohibitin with ab75766 at 1/100. An Alexa Fluor[®] 488-conjugated anti-rabbit IgG was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-Prohibitin antibody [EP2803Y] (ab75766)

Immunocytochemistry/Immunofluorescence analysis of NIH/3T3 (mouse embryo fibroblast cell line) cells labelling Prohibitin with ab75766 at 1/100. An Alexa Fluor[®] 488-conjugated anti-rabbit IgG was used as the secondary antibody.



Flow Cytometry (Intracellular) - Anti-Prohibitin antibody [EP2803Y] (ab75766)

ab75766 staining Prohibitin in the human cell line A431 (human epidermoid carcinomacell line) by intracellular flow cytometry. Cells were fixed with 4% paraformaldehyde and the sample was incubated with the primary antibody at a dilution of 1/120. A goat anti rabbit IgG (Alexa Fluor[®] 488) at a dilution of 1/500 was used as the secondary antibody.

Isoytype control: Rabbit monoclonal IgG (Black)

Unlabelled control: Cell without incubation with primary antibody and secondary antibody (Blue)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results

Long-term and scalable supply
Recombinant technology

Success from the first experiment
Confirmed specificity

Ethical standards compliant
Animal-free production

Anti-Prohibitin antibody [EP2803Y] (ab75766)

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

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