## abcam

#### Product datasheet

# Anti-Prohibitin antibody [EP2804Y] - Mitochondrial Marker ab75771

Recombinant RabMAb

13 References 11 Images

Overview

Product name Anti-Prohibitin antibody [EP2804Y] - Mitochondrial Marker

**Description** Rabbit monoclonal [EP2804Y] to Prohibitin - Mitochondrial Marker

Host species Rabbit

Tested applications
Suitable for: WB, IP, IHC-P, ICC/IF
Species reactivity
Reacts with: Mouse, Rat, Human

**Immunogen** Synthetic peptide within Human Prohibitin aa 150-250. The exact sequence is proprietary.

Positive control WB: MCF-7, PC-12, A431 and Ramos cell lysate; IHC-P: human hepatocellular carcinoma tissue,

mouse kidney tissue, mouse endometrium tissue, mouse liver tissue, rat liver tissue and rat

stomach tissue; ICC/IF: Hela and Neuro-2a cells. IP: MCF7

**General notes**This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

Improved sensitivity and specificityLong-term security of supplyAnimal-free production

For more information see here.

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

**Properties** 

Form Liquid

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

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

Purity Protein A purified

**Clonality** Monoclonal

1

Clone number EP2804Y

**Isotype** IgG

#### **Applications**

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab75771 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		1/500 - 1/1000. Predicted molecular weight: 30 kDa.
IP		1/110.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.
ICC/IF		1/100 - 1/250.

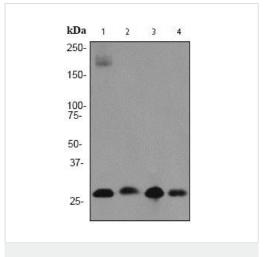
Prohibitin inhibits DNA synthesis. It has a role in regulating proliferation. As yet it is unclear if the protein or the mRNA exhibits this effect. May play a role in regulating mitochondrial respiration activity and in aging.	
Widely expressed in different tissues.	
Belongs to the prohibitin family.	

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

**Cellular localization** Mitochondrion inner membrane.

### Images

**Target** 



Western blot - Anti-Prohibitin antibody [EP2804Y] - Mitochondrial Marker (ab75771)

**All lanes :** Anti-Prohibitin antibody [EP2804Y] - Mitochondrial Marker (ab75771) at 1/1000 dilution

Lane 1: MCF-7 cell lysates

Lane 2: PC-12 cell lysates

Lane 3: A431 cell lysates

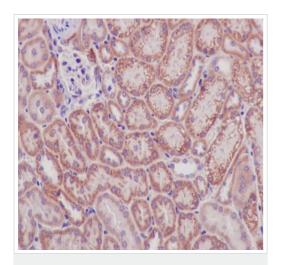
Lane 4: Ramos cell lysates

Lysates/proteins at 10 µg per lane.

#### Secondary

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

Predicted band size: 30 kDa Observed band size: 30 kDa

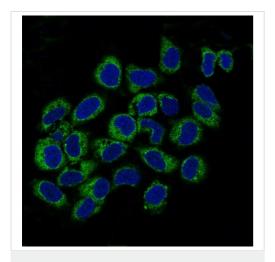


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Prohibitin antibody

[EP2804Y] - Mitochondrial Marker (ab75771)

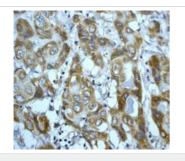
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse kidney tissue labelling Prohibitin with ab75771 at 1/250.

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-Prohibitin antibody [EP2804Y] - Mitochondrial Marker (ab75771)

Immunocytochemistry/Immunofluorescence analysis of HeLa cells labelling Prohibitin with <u>ab75711</u> at 1/250. An Alexa Fluor<sup>®</sup> 488-conjugated anti-rabbit lgG was used as the secondary antibody.

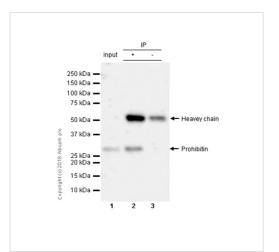


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Prohibitin antibody

[EP2804Y] - Mitochondrial Marker (ab75771)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human hepatocellular carcinoma tissue labelling Prohibitin with ab75771 at 1/100. A HRP/AP polymerized secondary antibody was used.

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



Immunoprecipitation - Anti-Prohibitin antibody
[EP2804Y] - Mitochondrial Marker (ab75771)

ab75771 (purified) at 1/110 dilution (20  $\mu$ g/ml) immunoprecipitating Prohibitin in MCF7 whole cell lysate .

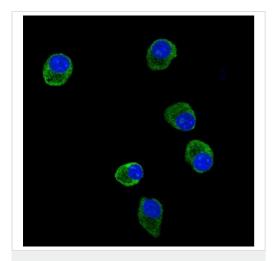
Lane 1 (input): MCF7(Human breast adenocarcinoma epithelial cell) whole cell lysate 10µg

Lane 2 (+): ab75771 & MCF7 whole cell lysate

Lane 3 (-): Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab75771 in MCF7 whole cell lysate

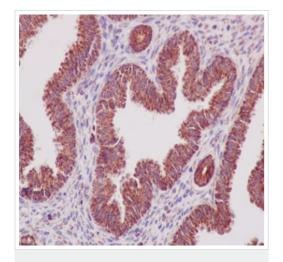
For western blotting, ab75771 at 1/500 dilution (4.3  $\mu$ g/ml) VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used for detection at 1/1000 dilution.

Blocking and diluting buffer: 5% NFDM /TBST.



Immunocytochemistry/ Immunofluorescence - Anti-Prohibitin antibody [EP2804Y] - Mitochondrial Marker (ab75771)

Immunocytochemistry/Immunofluorescence analysis of Neuro-2a cells labelling Prohibitin with <u>ab75711</u> at 1/250. An Alexa Fluor<sup>®</sup> 488-conjugated anti-rabbit lgG was used as the secondary antibody.

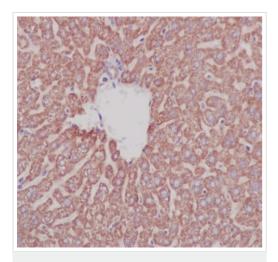


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Prohibitin antibody

[EP2804Y] - Mitochondrial Marker (ab75771)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse endometrium tissue labelling Prohibitin with ab75771 at 1/250.

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.

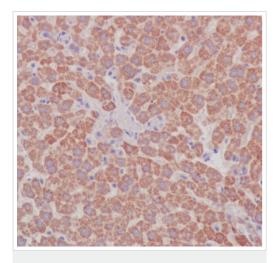


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Prohibitin antibody

[EP2804Y] - Mitochondrial Marker (ab75771)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse liver tissue labelling Prohibitin with ab75771 at 1/250.

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.

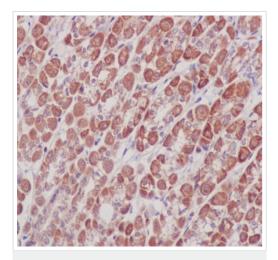


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Prohibitin antibody

[EP2804Y] - Mitochondrial Marker (ab75771)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat liver tissue labelling Prohibitin with ab75771 at 1/250.

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.

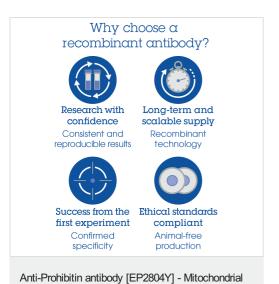


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Prohibitin antibody

[EP2804Y] - Mitochondrial Marker (ab75771)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat stomach tissue labelling Prohibitin with ab75771 at 1/250.

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



Marker (ab75771)

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