abcam

Product datasheet

Anti-Prohibitin antibody - Mitochondrial Marker ab28172

★★★★★ 6 Abreviews 59 References 画像数 6

製品の概要

製品名 Anti-Prohibitin antibody - Mitochondrial Marker

製品の詳細 Rabbit polyclonal to Prohibitin - Mitochondrial Marker

由来種 Rabbit

特異性 From Jan 2024, QC testing of replenishment batches of this polyclonal changed. All tested and

expected application and reactive species combinations are still covered by our Abcam product promise. However, we no longer test all applications. For more information on a specific batch,

please contact our Scientific Support who will be happy to help.

アプリケーション 適用あり: WB, ICC/IF, IHC-P

種交差性 交差種: Mouse, Rat, Human

交差が予測される動物種: Cow, Dog, Pig 🔷

免疫原 Synthetic peptide conjugated to KLH derived from within residues 200 - 300 of Human Prohibitin.

Immunogen の所有権に関して (Peptide available as ab28492.)

ポジティブ・コントロール Recombinant Human Prohibitin protein (<u>ab114204</u>) can be used as a positive control in WB.

ab28172 antibody gave a positive signal in the following Whole Cell Lysates: HeLa, A431, Jurkat, NIH 3T3, MEF-1 and PC12. In addition, ab28172 antibody gave a positive signal in the following Tissue Lysates: Brain (Mouse), Liver (Mouse), Heart (Mouse), Kidney (Mouse), Pancreas

(Mouse), Testis (Mouse), Skeletal Muscle (Mouse), Spinal Cord (Mouse), Ovary (Mouse), Brain

(Rat), Liver (Rat) and Heart (Rat).

特記事項The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

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バッファー pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

精製度 Immunogen affinity purified

ポリ/モノ ポリクローナル

アイソタイプ lgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab28172の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		Use a concentration of 1 - 5 µg/ml. Detects a band of approximately 30 kDa (predicted molecular weight: 30 kDa).
ICC/IF	★★★★ (3)	Use a concentration of 5 µg/ml.
IHC-P	**** <u>(3)</u>	Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

ターゲット情報

機能 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.

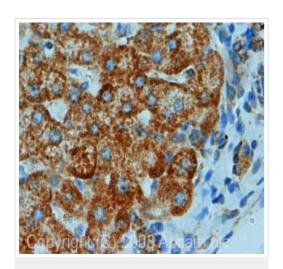
組織特異性 Widely expressed in different tissues.

配列類似性 Belongs to the prohibitin family.

発生段階 Levels of expression in fibroblasts decrease heterogeneously during cellular aging.

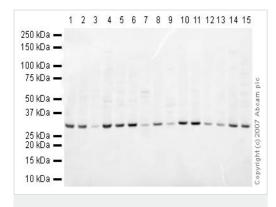
細胞内局在 Mitochondrion inner membrane.

画像



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Prohibitin antibody - Mitochondrial Marker (ab28172)

IHC image of Prohibitin staining in human liver FFPE section, performed on a Bond TM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab28172, 5µg/ml, for 8 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Western blot - Anti-Prohibitin antibody -Mitochondrial Marker (ab28172)

All lanes: Anti-Prohibitin antibody - Mitochondrial Marker (ab28172) at 1 µg/ml

Lane 1: NIH/3T3 whole cell lysate (ab7179)

Lane 2 : MEF1 (Mouse embryonic fibroblast cell line) Whole Cell Lysate

Lane 3: Brain (Mouse) Tissue Lysate

Lane 4: Liver (Mouse) Tissue Lysate - normal tissue

Lane 5 : Heart (Mouse) Tissue Lysate

Lane 6: Kidney (Mouse) Tissue Lysate

Lane 7: Mouse pancreas tissue lysate - total protein (ab29363)

Lane 8: Testis (Mouse) Tissue Lysate - normal tissue

Lane 9: Mouse skeletal muscle tissue lysate - total protein

(ab29711)

Lane 10: Spinal Cord (Mouse) Tissue Lysate

Lane 11 : Ovary (Mouse) Tissue Lysate - normal tissue

Lane 12: PC12 (Rat adrenal pheochromocytoma cell line) Whole

Cell Lysate

Lane 13: Brain (Rat) Tissue Lysate - normal tissue

Lane 14 : Liver (Rat) Tissue Lysate

Lane 15: Heart (Rat) Tissue Lysate

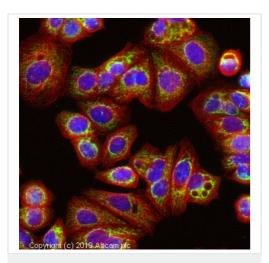
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : IRDye 680 Conjugated Goat Anti-Rabbit lgG (H+L) at 1/10000 dilution

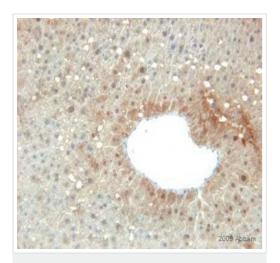
Performed under reducing conditions.

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



Immunocytochemistry/ Immunofluorescence - Anti-Prohibitin antibody - Mitochondrial Marker (ab28172)

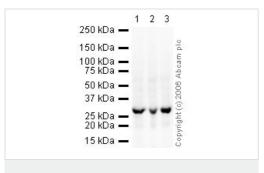
ab28172 staining Prohibitin in MCF7 cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Triton for 1h. The cells were then incubated with the antibody ab28172 at 5μg/ml and ab7291 (Mouse monoclonal to alpha Tubulin - Loading Control) used at a 1/1000 dilution overnight at +4°C. The secondary antibodies were ab150081, Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) preadsorbed, (pseudo-colored green) and ab150120, Goat polyclonal Secondary Antibody to Mouse lgG - H&L (Alexa Fluor® 594) preadsorbed, (colored red), both used at a 1/1000 dilution for 1 hour at room temperature. DAPI was used to stain the cell nuclei (colored blue) at a concentration of 1.43 μM for 1 hour at room temperature.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Prohibitin antibody - Mitochondrial Marker (ab28172)

This image is courtesy of an anonymous Abreview

ab28172 staining Prohibitin in mouse liver tissue section by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections). Tissue underwent fixation in formaldehyde, heat mediated antigen retrieval in Citrate buffer pH 6.0 and blocking in 1.5% serum for 10 minutes. The primary antibody was diluted, 1/400 and incubated with sample for 1 hour. A HRP conjugated goat polyclonal to rabbit IgG was used undiluted as secondary.



Western blot - Anti-Prohibitin antibody -Mitochondrial Marker (ab28172) All lanes : Anti-Prohibitin antibody - Mitochondrial Marker (ab28172) at 1 μ g/ml

Lane 1 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 2 : Jurkat whole cell lysate (ab7899)

Lane 3: A-431 whole cell lysate (ab7909)

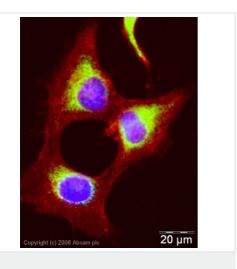
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP) at 1/10000 dilution

Performed under reducing conditions.

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



Immunocytochemistry/ Immunofluorescence - Anti-Prohibitin antibody - Mitochondrial Marker (ab28172) ICC/IF image of ab28172 stained human HeLa cells. The cells were methanol fixed (5 min) and incubated with the antibody (ab28172, 1µg/ml) for 1h at room temperature. The secondary antibody (green) was Alexa Fluor® 488 goat antirabbit IgG (H+L) used at a 1/1000 dilution for 1h. Image-iTTM FX Signal Enhancer was used to quench autofluorescence. 5% BSA (in TBS-T) was used for all other blocking steps. DAPI was used to stain the cell nuclei (blue). Alexa Fluor® 594 WGA was used to label plasma membranes (red).

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