# abcam

## Product datasheet

# Anti-15-PGDH antibody [EPR14332] ab187160

יולצעבע RabMAb

★★★★★ 2 Abreviews 2 References 画像数8

### 製品の概要

製品名 Anti-15-PGDH antibody [EPR14332]

製品の詳細 Rabbit monoclonal [EPR14332] to 15-PGDH

由来種 Rabbit

アプリケーション 適用あり: Flow Cyt (Intra), ICC/IF, WB, IHC-P

種交差性 交差種: Human

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール Cco-2, SW480, LoVo and Human placenta lysates; Human stomach and Human colon tissues;

SW480 and Caco-2 cells.

特記事項 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 production

For more information **see here**.

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

#### 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 long

term. Avoid freeze / thaw cycle.

バッファー pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified

ポリモノ モノクローナル クローン名 EPR14332

アイソタイプ ΙgG

**The Abpromise guarantee Abpromise保証は、**次のテスト済みアプリケーションにおけるab187160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
Flow Cyt (Intra)		1/90. <b>ab172730</b> - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
ICC/IF		1/250.
WB	★ size size size size (1)	1/1000 - 1/10000. Detects a band of approximately 25,29 kDa (predicted molecular weight: 29 kDa).
IHC-P	★★★★☆ (1)	1/4000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

### ターゲット情報

### 機能

Prostaglandin inactivation. Contributes to the regulation of events that are under the control of prostaglandin levels. Catalyzes the NAD-dependent dehydrogenation of lipoxin A4 to form 15-oxo-lipoxin A4. Inhibits in vivo proliferation of colon cancer cells.

# 組織特異性

Detected in colon epithelium (at protein level).

# 関連疾患

Defects in HPGD are the cause of primary hypertrophic osteoathropathy autosomal recessive (PHOAR) [MIM:259100]; also known as pachydermoperiostosis autosomal recessive. Primary hypertrophic osteoarthropathy is characterized by digital clubbing, osterarthropathy, variable features of pachydermia, delayed closure of the fontanels, and congenital heart disease. Defects in HPGD are the cause of cranioosteoarthropathy (COA) [MIM:259100]. Clinical features include infantile onset of swelling of the joints, digital clubbing, hyperhidrosis, delayed closure of the fontanels, periostosis, and variable patent ductus arteriosus. Pachydermia is not a prominent feature.

Defects in HPGD are a cause of isolated congenital nail clubbing (ICNC) [MIM:119900]; also called clubbing of digits or hereditary acropachy. ICNC is a rare genodermatosis characterized by enlargement of the nail plate and terminal segments of the fingers and toes, resulting from proliferation of the connective tissues between the nail matrix and the distal phalanx. It is usually symmetrical and bilateral (in some cases unilateral). In nail clubbing usually the distal end of the nail matrix is relatively high compared to the proximal end, while the nail plate is complete but its dimensions and diameter more or less vary in comparison to normal. There may be different fingers and toes involved to varying degrees. Some fingers or toes are spared, but the thumbs are almost always involved.

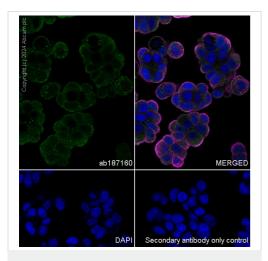
#### 配列類似性

Belongs to the short-chain dehydrogenases/reductases (SDR) family.

細胞内局在

Cytoplasm.

### 画像



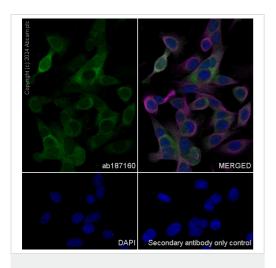
Immunocytochemistry/ Immunofluorescence - Anti-15-PGDH antibody [EPR14332] (ab187160)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized MCF-7 (human breast adenocarcinoma epithelial cell) labeling 15-PGDH with ab187160 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green).

Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) (**ab195889**) at 1/200 was used as a counterstain (red).

The nuclear counterstain is DAPI (blue).

Confocal image showing mainly cytoplasmic staining in MCF-7 cell line.



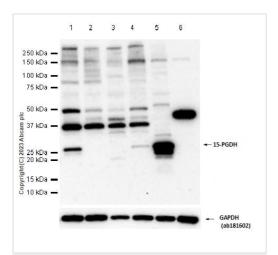
Immunocytochemistry/ Immunofluorescence - Anti-15-PGDH antibody [EPR14332] (ab187160)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized SW480 (Human colorectal adenocarcinoma epithelial cell) labeling 15-PGDH with ab187160 at 1/100 dilution, followed by Goat Anti-Rabbit lgG H&L (Alexa Fluor<sup>®</sup> 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) (ab195889) at 1/200 was used as a counterstain (red).

The nuclear counterstain is DAPI (blue).

Confocal image showing mainly cytoplasmic staining in SW480 cell line.



Western blot - Anti-15-PGDH antibody [EPR14332] (ab187160)

**All lanes :** Anti-15-PGDH antibody [EPR14332] (ab187160) at 1/1000 dilution

**Lane 1 :** HCT-15 (human colorectal carcinoma epithelial cell) whole cell lysate

**Lane 2 :** HCT116 (human colorectal carcinoma epithelial cell) whole cell lysate

**Lane 3**: PANC-1 (human pancreatic epithelioid carcinoma epithelial cell) whole cell lysate

**Lane 4**: HEK-293 (human embryonic kidney epithelial cell) whole cell lysate

Lane 5 : Human colon tissue lysate
Lane 6 : Human heart tissue lysate

Lysates/proteins at 20 µg per lane.

### Secondary

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

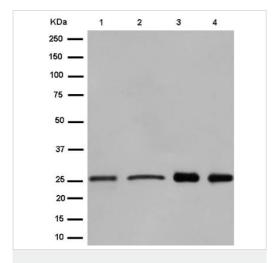
dilution

Predicted band size: 29 kDa Observed band size: 29 kDa

Exposure time: 80 seconds

Blocking and Diluting Buffer: 5% NFDM/TBST

The expression profile observed in HCT-116, PANC-1 and human heart are consistent with the literatures (PMID: 15542609, PMID: 30250298). Negative control: HCT-116, PANC-1 and human heart (PMID: 15542609, PMID: 30250298).



Western blot - Anti-15-PGDH antibody [EPR14332] (ab187160)

**All lanes :** Anti-15-PGDH antibody [EPR14332] (ab187160) at 1/10000 dilution

Lane 1 : caco-2 cell lysate

Lane 2 : SW480 cell lysate

Lane 3: LoVo cell lysate

Lane 4: Human placenta lysate

Lysates/proteins at 20 µg per lane.

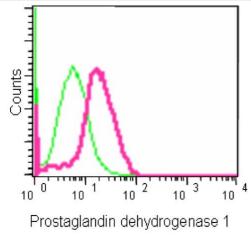
### **Secondary**

**All lanes :** Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 29 kDa

Additional bands at: 25 kDa. We are unsure as to the identity of

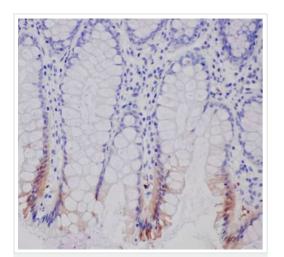
these extra bands.



Flow Cytometry (Intracellular) - Anti-15-PGDH

antibody [EPR14332] (ab187160)

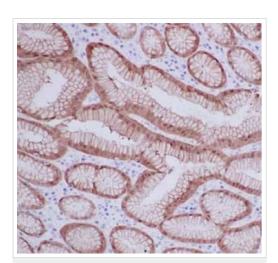
Intracellular flow cytometrical analysis of Caco-2 cells labeling 15-PGDH with ab187160 at 1/90 compared to a Isotype control. FITCconjugated goat-anti-rabbit secondary antibody at 1/150 used for the analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-15-PGDH antibody [EPR14332] (ab187160)

Immunohistochemical analysis of paraffin embedded Human colon tissue labeling 15-PGDH with ab187160 at 1/4000 with a prediluted HRP Polymer for Rabbit IgG as secondary antibody.

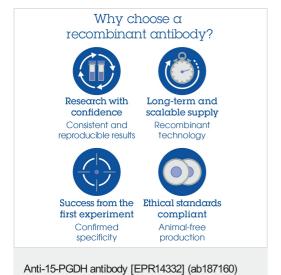
Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-15-PGDH antibody
[EPR14332] (ab187160)

Immunohistochemical analysis of paraffin embedded Human stomach tissue labeling 15-PGDH with ab187160 at 1/4000 with a prediluted HRP Polymer for Rabbit lgG as secondary antibody.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



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