# abcam

## Product datasheet

## Anti-GAPDH antibody [EPR16884] - Loading Control ab181603

יעלאעבע RabMAb

★★★★★ 6 Abreviews 193 References 画像数 10

#### 製品の概要

製品名 Anti-GAPDH antibody [EPR16884] - Loading Control

製品の詳細 Rabbit monoclonal [EPR16884] to GAPDH - Loading Control

由来種 Rabbit

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

種交差性 交差種: Mouse, Rat, Chicken, Cow, Dog, Human, African green monkey

交差が予測される動物種: Monkey 🔷

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 WB: HeLa, MDBK, COS-1, MDCK, UMNSAH/DF-1, Jurkat, C6 and NIH/3T3 whole cell lysates;

> Mouse brain and heart lysates; Rat brain, heart, kidney and spleen lysates; Human fetal brain, heart and kidney lysates. IHC-P: Human transitional cell carcinoma of bladder, Mouse spleen and

Rat spleen tissues. ICC/IF: HeLa cells. Flow: Jurkat 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 Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 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

EPR16884

アイソタイプ

lgG

## アプリケーション

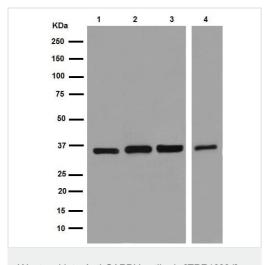
**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab181603の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/200.  ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (3)	1/10000. Detects a band of approximately 36 kDa (predicted molecular weight: 36 kDa).
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF	★★★★☆ (3)	1/250.

## ターゲット情報

機能	Has both glyceraldehyde-3-phosphate dehydrogenase and nitrosylase activities, thereby playing a role in glycolysis and nuclear functions, respectively. Participates in nuclear events including transcription, RNA transport, DNA replication and apoptosis. Nuclear functions are probably due to the nitrosylase activity that mediates cysteine S-nitrosylation of nuclear target proteins such as SIRT1, HDAC2 and PRKDC (By similarity). Glyceraldehyde-3-phosphate dehydrogenase is a key enzyme in glycolysis that catalyzes the first step of the pathway by converting D-glyceraldehyde 3-phosphate (G3P) into 3-phospho-D-glyceroyl phosphate.
パスウェイ	Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 1/5.
配列類似性	Belongs to the glyceraldehyde-3-phosphate dehydrogenase family.
翻訳後修飾	S-nitrosylation of Cys-152 leads to interaction with SIAH1, followed by translocation to the nucleus.  ISGylated.
細胞内局在	Cytoplasm > cytosol. Nucleus. Cytoplasm > perinuclear region. Membrane. Translocates to the nucleus following S-nitrosylation and interaction with SIAH1, which contains a nuclear localization signal (By similarity). Postnuclear and Perinuclear regions.

## 画像



Western blot - Anti-GAPDH antibody [EPR16884] - Loading Control (ab181603)

**All lanes :** Anti-GAPDH antibody [EPR16884] - Loading Control (ab181603) at 1/10000 dilution

**Lane 1 :** HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysates

Lane 2: MDBK (Bovine kidney cell line) whole cell lysates

**Lane 3**: COS-1 (African green monkey kidney fibroblast-like cell line) whole cell lysates

Lane 4: MDCK (Canine kidney cell line) whole cell lysates

Lysates/proteins at 20 µg per lane.

#### **Secondary**

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

Predicted band size: 36 kDa
Observed band size: 36 kDa

**Observed band size:** 36 kDa

KDa 1 2
250 —
150 —
100 —
75 —
50 —
37 —
25 —
20 —
15 —
10 —

Western blot - Anti-GAPDH antibody [EPR16884] - Loading Control (ab181603)

Blocking/Dilution buffer: 5% NFDM/TBST.

**All lanes :** Anti-GAPDH antibody [EPR16884] - Loading Control (ab181603) at 1/50000 dilution

**Lane 1 :** UMNSAH/DF-1 (Transformed chicken embyronic fibroblast cells) whole cell lysates

**Lane 2**: Jurkat (Human T cell leukemia cells from peripheral blood) whole cell lysates

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:** 36 kDa **Observed band size:** 36 kDa

KDa 2 3 5 6 7 8 250 150 100 75 50 25 -20 15 -10

Western blot - Anti-GAPDH antibody [EPR16884] - Loading Control (ab181603)

Blocking/Dilution buffer: 5% NFDM/TBST.

**All lanes :** Anti-GAPDH antibody [EPR16884] - Loading Control (ab181603) at 1/10000 dilution

Lane 1: Mouse brain lysate

Lane 2: Mouse heart lysate

Lane 3: Rat brain lysate

Lane 4: Rat heart lysate

Lane 5: Rat kidney lysate

Lane 6: Rat spleen lysate

Lane 7: C6 (Rat glial tumor cells) whole cell lysates

Lane 8: NIH/3T3 (Mouse embyro fibroblast cells) whole cell lysates

Lysates/proteins at 10 µg per lane.

### Secondary

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

Predicted band size: 36 kDa Observed band size: 36 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

KDa 1 2 3

250 —

150 —

100 —

75 —

50 —

37 —

25 —

20 —

15 —

10 —

Western blot - Anti-GAPDH antibody [EPR16884] - Loading Control (ab181603)

**All lanes :** Anti-GAPDH antibody [EPR16884] - Loading Control (ab181603) at 1/10000 dilution

Lane 1 : Human fetal brain lysate
Lane 2 : Human fetal heart lysate

Lane 3: Human fetal kidney lysate

Lysates/proteins at 10 µg per lane.

#### **Secondary**

**All lanes :** Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/1000 dilution

**Predicted band size:** 36 kDa **Observed band size:** 36 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

ab181603 MERGED

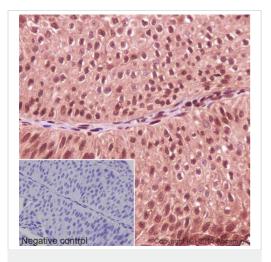
DAPI -ve control 1 -ve control 2

Immunocytochemistry/ Immunofluorescence - Anti-GAPDH antibody [EPR16884] - Loading Control (ab181603)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling GAPDH with ab181603 at 1/250 dilution, followed by Goat anti-rabbit lgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/400 dilution (green). Cytoplasm and nuclear staining on HeLa cell line is observed. The nuclear counter stain is DAPI (blue). Tubulin is detected with ab7291 (anti-Tubulin mouse mAb) at 1/500 dilution and ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution

The negative controls are as follows;

1. ab181603 at 1/250 dilution followed by <u>ab150120</u> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.
2. <u>ab7291</u> (anti-Tubulin mouse mAb) at 1/500 dilution followed by <u>ab150077</u> (Alexa Fluor®488 Goat Anti-Rabbit lgG H&L) at 1/400 dilution.



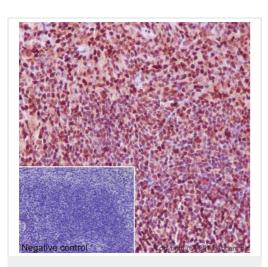
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GAPDH antibody

[EPR16884] - Loading Control (ab181603)

Immunohistochemical analysis of paraffin-embedded Human transitional cell carcinoma of bladder tissue labeling GAPDH with ab181603 at 1/500 dilution, followed by prediluted HRP Polymer for Rabbit/Mouse IgG. Cytoplasmic and nucleus staining on the tumor cells of transitional cell carcinoma of Human bladder is observed. Counter stained with Hematoxylin.

Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse lgG.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



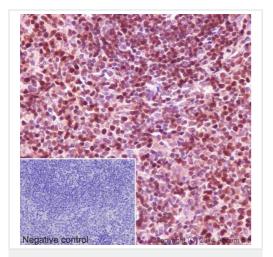
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GAPDH antibody

[EPR16884] - Loading Control (ab181603)

Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labeling GAPDH with ab181603 at 1/500 dilution, followed by prediluted HRP Polymer for Rabbit/Mouse IgG. Nucleus and cytoplasmic staining on lymphocytes of mouse spleen is observed. Counter stained with Hematoxylin.

Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse lgG.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

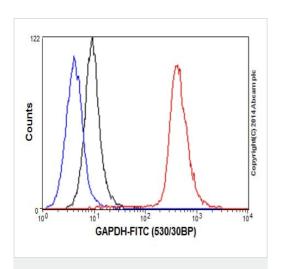


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-GAPDH antibody
[EPR16884] - Loading Control (ab181603)

Immunohistochemical analysis of paraffin-embedded Rat spleen tissue labeling GAPDH with ab181603 at 1/500 dilution, followed by prediluted HRP Polymer for Rabbit/Mouse lgG. Nucleus and cytoplasmic staining on lymphocyte of rat spleen is observed. Counter stained with Hematoxylin.

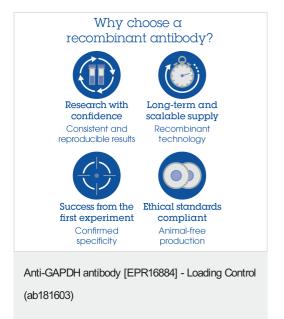
Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse lgG.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-GAPDH antibody [EPR16884] - Loading Control (ab181603)

Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed Jurkat (Human T cell leukemia cells from peripheral blood) cells labeling GAPDH with ab181603 at 1/200 dilution (red) compared with a rabbit monoclonal lgG isotype control (black) and a unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit lgG (FITC) at 1/150 dilution was used as the secondary antibody.



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