abcam

Product datasheet

Anti-KLF4 antibody [EPR20753-25] ab214666



重组 RabMAb

★★★★★ 1 Abreviews 15 References 7 图像

概述

产品名称 Anti-KLF4抗体[EPR20753-25]

描述 兔单克隆抗体[EPR20753-25] to KLF4

宿主 Rabbit

经测试应用 适用于: IHC-P, WB, ICC/IF, IP, IHC - Wholemount

种属反应性 与反应: Mouse, Rat

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

阳性对照 WB: F9 and ES-D3 whole cell lysate; Mouse and rat skin and mouse colon tissue lysate. IHC-P:

Mouse and rat colon tissue. ICC/IF: F9 cells. IP: F9 whole cell lysate.

常规说明 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**.

性能

形式 Liquid

存放说明 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.

存储溶液 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: PBS, 0.05% BSA, 40% Glycerol

纯度 Protein A purified

克隆 单克隆

克隆编号 EPR20753-25

同种型 ΙgG

The Abpromise guarantee Abpromise™承诺保证使用ab214666于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P		1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		1/1000. Predicted molecular weight: 54 kDa.
ICC/IF		1/1000.
IP		1/30.
IHC - Wholemount	*** <u>*</u> (1)	Use at an assay dependent concentration.

靶标

功能 Transcription factor; can act both as activator and as repressor. Binds the 5'-CACCC-3' core

sequence. Binds to the promoter region of its own gene and can activate its own transcription. Regulates the expression of key transcription factors during embryonic development. Plays an important role in maintaining embryonic stem cells, and in preventing their differentiation. Required for establishing the barrier function of the skin and for postnatal maturation and maintenance of the ocular surface. Involved in the differentiation of epithelial cells and may also function in skeletal and kidney development. Contributes to the down-regulation of p53/TP53 transcription.

序列相似性 Belongs to the krueppel C2H2-type zinc-finger protein family.

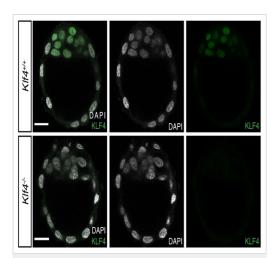
Contains 3 C2H2-type zinc fingers.

结**构域** the 9aaTAD motif is a transactivation domain present in a large number of yeast and animal

transcription factors.

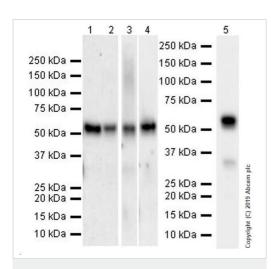
细胞定位 Nucleus.

图片



IHC - Wholemount - Anti-KLF4 antibody [EPR20753-25] (ab214666)

Image courtesy of Vidur Garg from the Sloan-Kettering Institute



Western blot - Anti-KLF4 antibody [EPR20753-25] (ab214666)

Several embryos at the mid-blastocyst stage (~E3.75) were tested. The embryos were fixed for 10 mins at room temperature in 4% PFA. Fixed embryos were washed for 5 mins in PBS + 0.1% Triton X-100 (PBX) at room temperature. The embryos were then permeabilized in PBS + 0.5% Triton X-100 + 100mM Glycine for 5 mins at room temperature and washed again in PBX for 5 mins at room temperature. Blocking was carried out for 1 hour at room temperature in PBS + 2% horse serum and then the embryos were incubated overnight in ab214666 (1/1000) diluted in blocking solution. The next day embryos were washed three times for 5 mins each in PBX, before blocking again for 1 hour at room temperature. Then incubated in Donkey anti rabbit Alexa Fluor® 488 secondary antibodies (1/500) diluted in blocking solution for 1 hour at 4°C. This was followed by 2 washes of 5 mins each in PBX. The embryos were then incubated in PBS + 5µg/ml DAPI for 10 min, or until mounting for imaging. Images were acquired on a laser-scanning confocal microscope system. Displayed image shows maximum intensity projection of 5 optical sections acquired at 1µm increments. Scale bar: 20 µm

Lanes 1-4: Anti-KLF4 antibody [EPR20753-25] (ab214666) at 1/1000 dilution

Lane 5: Anti-KLF4 antibody [EPR20753-25] (ab214666) at 1/5000 dilution

Lane 1 : F9 (mouse embryonal carcinoma epithelial cell), whole cell lysate

Lane 2: Mouse skin tissue lysate

Lane 3: Mouse colon tissue lysate

Lane 4: Rat skin tissue lysate

Lane 5: ES D3 (mouse embryonic stem cell), whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

Lanes 1-4: Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/20000 dilution

Lane 5 : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 54 kDa Observed band size: 52 kDa

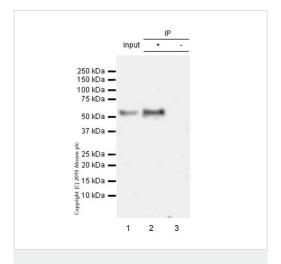
Exposure times:

Lanes 1-2: 3 minutes

Lane 3-4: 92 seconds

Lane 5: 48 seconds

Blocking/Diluting buffer and concentration: 5% NFDM/TBST



Immunoprecipitation - Anti-KLF4 antibody [EPR20753-25] (ab214666)

KLF4 was immunoprecipitated from 0.35 mg F9 (Mouse embryonal carcinoma epithelial cell) whole cell lysate using ab214666 at 1/30 dilution. Western blot was performed on the immunoprecipitate using ab214666 at 1/1000 dilution. VeriBlot for IP secondary antibody (HRP) (ab131366) was used as the secondary at 1/5000 dilution.

Lane 1: F9 whole cell lysate 10 µg (input).

Lane 2: ab214666 IP in F9 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab214666 in F9 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 minutes.

Fresh lysate was required and IP test was conducted immediately. Incubation time was shortened from overnight to 2h.



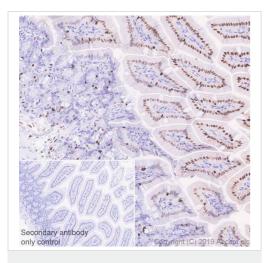
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-KLF4 antibody

[EPR20753-25] (ab214666)

Immunohistochemical analysis of paraffin-embedded Rat colon tissue labeling KLF4 with ab214666 at 1/1000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP) secondary antibody. Nuclear staining on epithelial cells of rat colon (PMID: 21070761, PMID: 19109406) is observed. Counterstained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit lgG H&L (HRP).

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

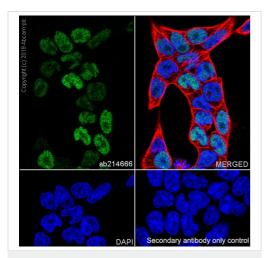


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-KLF4 antibody
[EPR20753-25] (ab214666)

Immunohistochemical analysis of paraffin-embedded Mouse colon tissue labeling KLF4 with ab214666 at 1/1000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP) secondary antibody. Nuclear staining on epithelial cells of mouse colon (PMID: 21070761, PMID: 19109406) is observed. Counterstained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit lgG H&L (HRP).

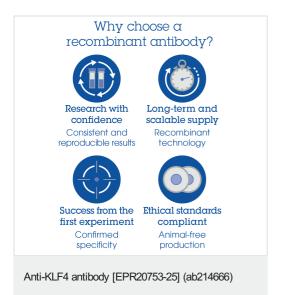
Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-KLF4 antibody [EPR20753-25] (ab214666)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized F9 (mouse embryonal carcinoma epithelial cell) cells labeling KLF4 with ab214666 at 1/100 dilution, followed by a AlexaFluor[®]488 Goat anti-Rabbit secondary (ab150077) at 1/1000 dilution (Green). Confocal image showing nuclear staining in F9 cell line is observed. The nuclear counterstain was DAPI (Blue). Tubulin was counterstained using an Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594, ab195889, Red) at 1.200 dilution.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a AlexaFluor[®]488 Goat anti-Rabbit secondary (**ab150077**) at 1/1000.



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

Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- · We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.cn/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors