

Product datasheet

Anti-KLF4 antibody [EPR19590] αb215036

Recombinant **RabMAb**

★★★★★ **5 Abreviews** **40 References** [9 Images](#)

Overview

Product name	Anti-KLF4 antibody [EPR19590]
Description	Rabbit monoclonal [EPR19590] to KLF4
Host species	Rabbit
Tested applications	Suitable for: IP, Flow Cyt (Intra), IHC-P, WB, ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: NCCIT whole cell lysate. IHC-P: Human stomach, gastric cancer and seminoma tissues. ICC/IF: NCCIT cells. Flow Cyt (intra): NCCIT cells. IP: NCCIT cell lysate
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol, 0.05% BSA</p>
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR19590
Isotype	IgG

Applications

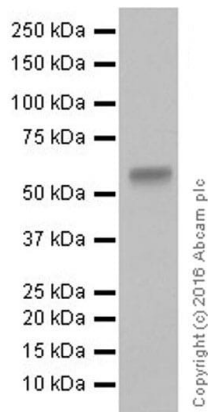
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab215036 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		1/30.
Flow Cyt (Intra)		1/50.
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB	★★★★★ (1)	1/1000. Detects a band of approximately 54 kDa (predicted molecular weight: 54 kDa).
ICC/IF	★★★★★ (3)	1/100.

Target

Function	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.
Sequence similarities	Belongs to the krueppel C2H2-type zinc-finger protein family. Contains 3 C2H2-type zinc fingers.
Domain	the 9aaTAD motif is a transactivation domain present in a large number of yeast and animal transcription factors.
Cellular localization	Nucleus.

Images



Western blot - Anti-KLF4 antibody [EPR19590] (ab215036)

Anti-KLF4 antibody [EPR19590] (ab215036) at 1/1000 dilution + NCCIT (Human pluripotent embryonic carcinoma cell line) whole cell lysate at 10 µg

Secondary

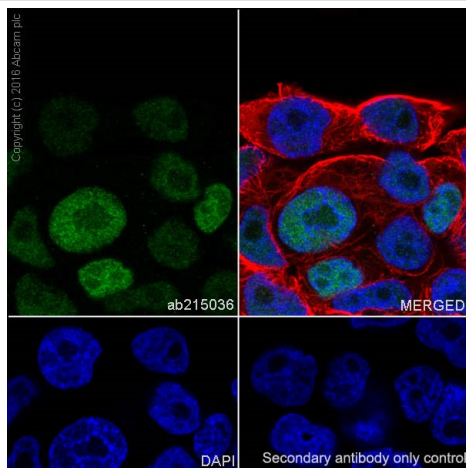
Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Predicted band size: 54 kDa

Observed band size: 54 kDa

Exposure time: 10 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-KLF4 antibody [EPR19590] (ab215036)

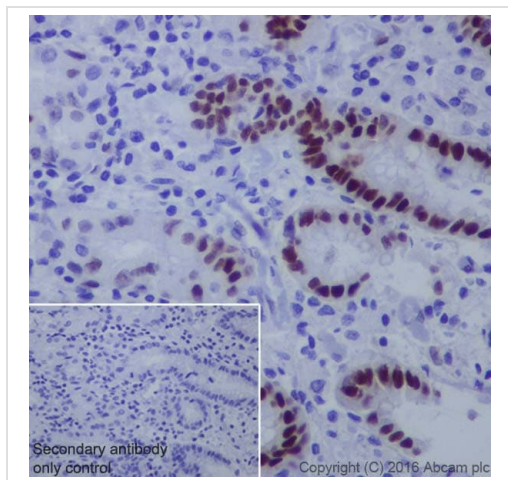
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized NCCIT (Human pluripotent embryonic carcinoma cell line) cells labeling KLF4 with ab215036 at 1/100 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) ([ab150077](#)) secondary antibody at 1/1000 dilution (green).

Confocal image showing nuclear staining on NCCIT cell line.

The nuclear counterstain is DAPI (blue).

Tubulin is detected with [ab195889](#) (Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594)) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit IgG (Alexa Fluor® 488) ([ab150077](#)) at 1/1000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KLF4 antibody [EPR19590] (ab215036)

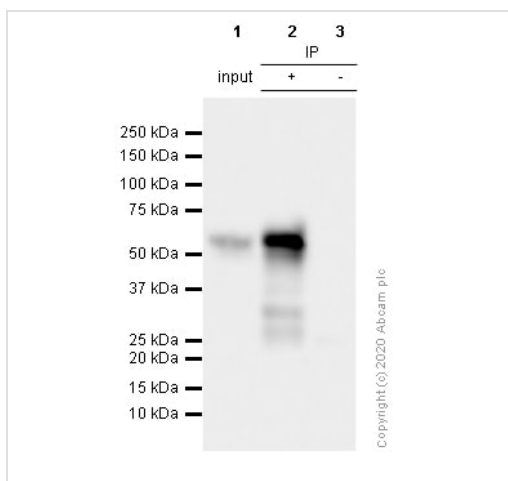
Immunohistochemical analysis of paraffin-embedded human stomach tissue labeling KLF4 with ab215036 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

Nuclear staining on human stomach is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

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



Immunoprecipitation - Anti-KLF4 antibody [EPR19590] (ab215036)

ab215036 (purified) at 1/30 dilution immunoprecipitating KLF4 in NCCIT whole cell lysate.

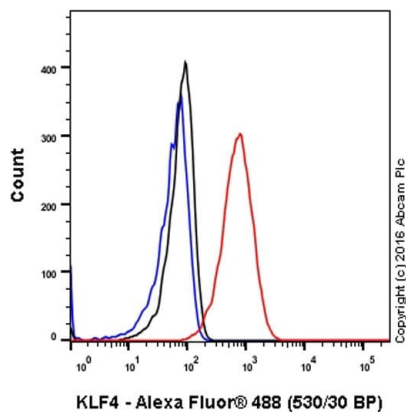
Lane 1 (input): NCCIT (Human pluripotent embryonic carcinoma epithelial cell) whole cell lysate 10 µg

Lane 2 (+): ab215036 & NCCIT whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG ([ab172730](#)) instead of ab215036 in NCCIT whole cell lysate

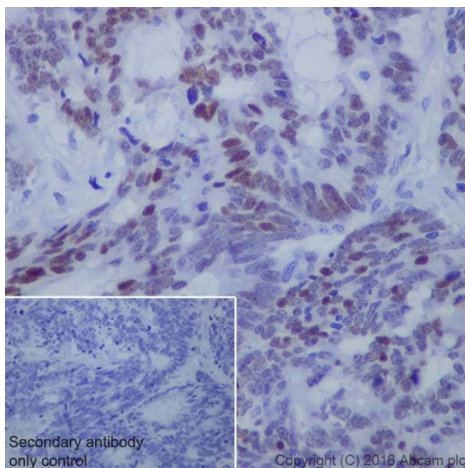
For western blotting, ab215036 at 1/500 dilution (0.117 µg/ml) and veriBlot for IP secondary antibody (HRP) ([ab131366](#)) was used at 1/1000 dilution were used.

Blocking and diluting buffer: 5% NFDM /TBST .



Flow Cytometry (Intracellular) - Anti-KLF4 antibody
[EPR19590] (ab215036)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed NCCIT (Human pluripotent embryonic carcinoma cell line) cells labeling KLF4 with ab215036 at 1/50 dilution (red) compared with a rabbit monoclonal IgG isotype control (**ab172730**; black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KLF4 antibody
[EPR19590] (ab215036)

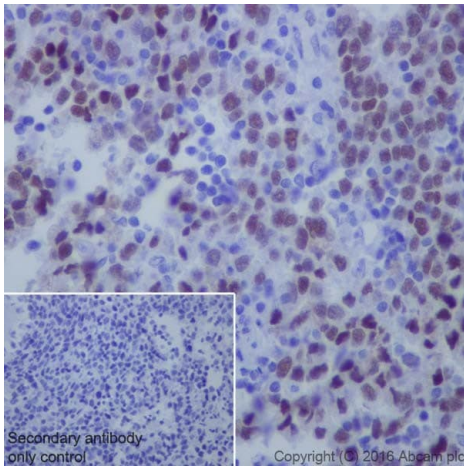
Immunohistochemical analysis of paraffin-embedded human gastric cancer tissue labeling KLF4 with ab215036 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

Nuclear staining on tumor cells of human gastric cancer is observed [PMID: 17614846].

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-KLF4 antibody [EPR19590] (ab215036)

Immunohistochemical analysis of paraffin-embedded human seminoma tissue labeling KLF4 with ab215036 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

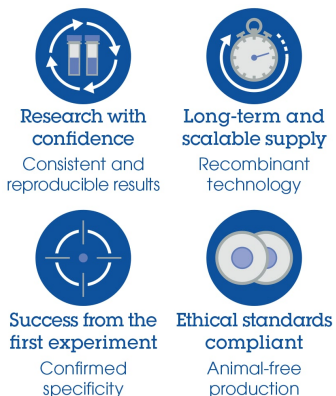
Nuclear staining on tumor cells of human seminoma is observed [PMID: 17614846].

Counter stained with Hematoxylin.

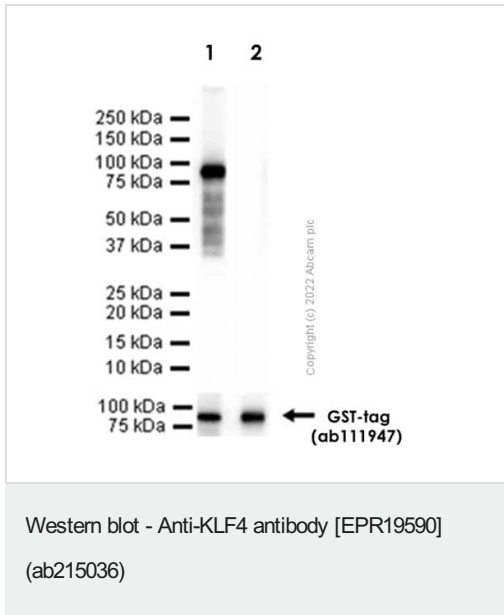
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) at 1/500 dilution.

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

Why choose a recombinant antibody?



Anti-KLF4 antibody [EPR19590] (ab215036)



All lanes : Anti-KLF4 antibody [EPR19590] (ab215036) at 1/1000 dilution

Lane 1 : GST tagged Recombinant Human KLF4 protein (Full length, 81 KDa)

Lane 2 : GST tagged Recombinant Human Adipose Triglyceride Lipase (PNPLA2) protein (Full length, 82 KDa)

Secondary

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

Performed under reducing conditions.

Predicted band size: 54 kDa

Observed band size: 81 kDa

Exposure time: 1 second

Blocking buffer and concentration: 5% NFDM/TBST

Diluting buffer and concentration: 5% NFDM/TBST

Gel type: 4-20% gradient gel(SDS-PAGE)

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