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KLF4 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2725E

Product Information

Application	IF, IHC-P, WB, E
Primary Accession	O43474
Other Accession	NP_004226
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17718
Calculated MW	54671

Additional Information

Gene ID	9314
Other Names	Krueppel-like factor 4, Epithelial zinc finger protein EZF, Gut-enriched krueppel-like factor, KLF4, EZF, GKLF
Target/Specificity	This KLF4 antibody is generated from rabbits immunized with a his tag recombinant protein of human KLF4.
Dilution	IF~~1:10~50 IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	KLF4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KLF4 (HGNC:6348)
Synonyms	EZF, GKLF
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.

Cellular Location Nucleus {ECO:0000250|UniProtKB:Q60793}. Cytoplasm {ECO:0000250|UniProtKB:Q60793}

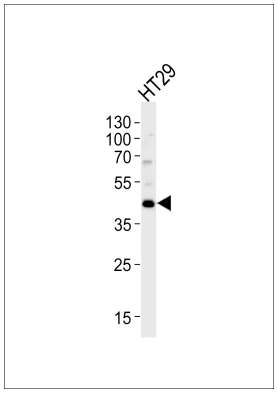
Background

Kr

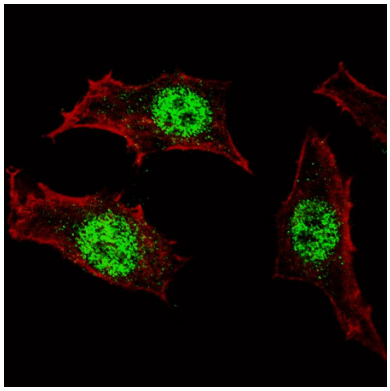
References

Alder,J.K., J. Immunol. 180 (8), 5645-5652 (2008)
Natesampillai,S., Am. J. Physiol. Endocrinol. Metab. 294 (2), E385-E391 (2008)
Evans,P.M., J. Biol. Chem. 282 (47), 33994-34002 (2007)
Behr,R., Mol. Hum. Reprod. 13 (11), 815-820 (2007)

Images

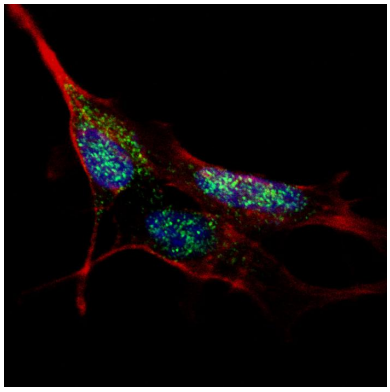


Western blot analysis of lysate from HT29 cell line, using KLF4 Antibody(Cat. #AP2725e). AP2725e was diluted at 1:1000. A goat anti-rabbit (HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug .

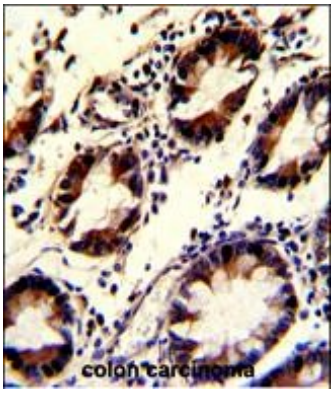


Fluorescent confocal image of HeLa cells stained with AP2725e KLF4 antibody. HeLa cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.2%, 30 min), then incubated with AP2725e KLF4 primary antibody (1:100, 2 h at room temperature). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:1000, 1h). Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (5.25 µM, 25 min). KLF4 immunoreactivity is localized specifically to the nuclei in HeLa cells.

Fluorescent confocal image of SY5Y cells stained with AP2725e KLF4 antibody. SY5Y cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.2%, 30 min), then incubated with AP2725e KLF4 primary antibody (1:100, 2 h at room temperature). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:1000, 1h). Cytoplasmic actin



was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (5.25 µM, 25 min). Nuclei were counterstained with Hoechst 33342 (blue) (10 µg/ml, 3 min). KLF4 immunoreactivity is localized to the nuclei in SY5Y cells.



Formalin-fixed and paraffin-embedded human colon carcinoma with KLF4 Antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.