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KLF4 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11958b

Product Information

Application	IF, FC, WB, E
Primary Accession	O43474
Other Accession	NP_004226
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	54671
Antigen Region	394-421

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 KLH conjugated synthetic peptide between 394-421 amino acids from the C-terminal region of human KLF4.
Dilution	IF~~1:10~50 FC~~1:10~50 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 (C-term) 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}

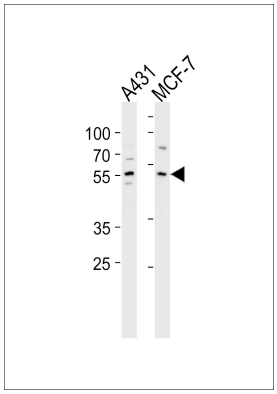
Background

KLF4 is a transcription factor which acts as both an activator and repressor. Binds the CACCC core sequence. Binds to multiple sites in the 5'-flanking region of its own gene and can activate its own transcription. 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.

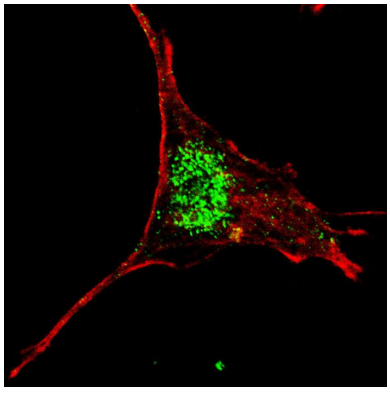
References

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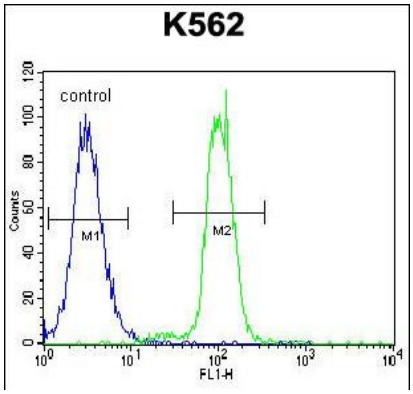
Images



KLF4 Antibody (C-term) (Cat. #AP11958b) western blot analysis in A431,MCF-7 cell line lysates (35ug/lane).This demonstrates the KLF4 antibody detected the KLF4 protein (arrow).



Fluorescent confocal image of SY5Y cells stained with AP11958b KLF4 (C-term) antibody. SY5Y cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.2%, 30 min), then incubated with AP11958b KLF4 (C-term) primary antibody (1:200, 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 very specifically to the nuclei of the SY5Y cells.



KLF4 Antibody (C-term) (Cat. #AP11958b) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.