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Mouse Klf4 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21134a

Product Information

Application	WB, FC, E
Primary Accession	Q60793
Reactivity	Mouse
Predicted	Rat, Rabbit
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB50946
Calculated MW	51880

Additional Information

Gene ID	16600
Other Names	Krueppel-like factor 4, Epithelial zinc finger protein EZF, Gut-enriched krueppel-like factor, Klf4, Ezf, Gklf, Zie
Target/Specificity	This Mouse Klf4 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 321-354 amino acids from the Central region of mouse Klf4.
Dilution	WB~~1:1000 FC~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	Mouse Klf4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Klf4
Synonyms	Ezf, Gklf, Zie
Function	Transcription factor; can act both as activator and as repressor. Binds the 5'-CACCC-3' core sequence (PubMed:10431239, PubMed:10556311,

PubMed:15358627, PubMed:16954384, PubMed:17060454, PubMed:19816951, PubMed:20071344, PubMed:29593216, PubMed:39986490). Binds to the promoter region of its own gene and can activate its own transcription (PubMed:10431239, PubMed:10556311, PubMed:15358627, PubMed:16954384, PubMed:17060454, PubMed:19816951, PubMed:20071344, PubMed:29593216). Regulates the expression of key transcription factors during embryonic development (PubMed:10431239, PubMed:10556311, PubMed:15358627, PubMed:16954384, PubMed:17060454, PubMed:19816951, PubMed:20071344, PubMed:29593216). Plays an important role in maintaining embryonic stem cells, and in preventing their differentiation (PubMed:10431239, PubMed:10556311, PubMed:15358627, PubMed:16954384, PubMed:17060454, PubMed:19816951, PubMed:20071344, PubMed:29593216). 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 (By similarity).

Cellular Location Nucleus. Cytoplasm

Tissue Location Highest expression in the colon. Lower levels in testis, lung and small intestine

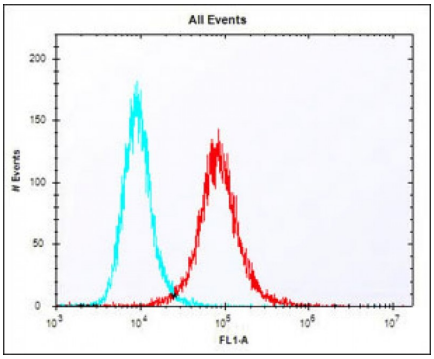
Background

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 (By similarity).

References

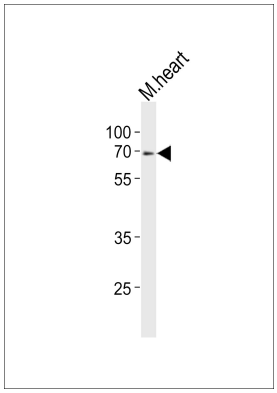
Shields J.M.,et al.J. Biol. Chem. 271:20009-20017(1996).
Garrett-Sinha L.A.,et al.J. Biol. Chem. 271:31384-31390(1996).
Mahatan C.S.,et al.Nucleic Acids Res. 27:4562-4569(1999).
Chen Z.-Y.,et al.Exp. Cell Res. 281:19-27(2002).
Carninci P.,et al.Science 309:1559-1563(2005).

Images

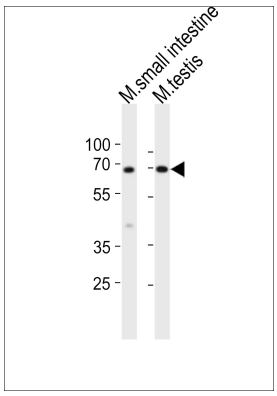


Overlay histogram showing NIH/3T3 cells stained with AP21134a (red line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP21134a, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit lgG (H+L) (1583138) at 1/400 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same

conditions. Acquisition of >10, 000 events was performed.



Western blot analysis of lysate from mouse heart tissue lysate, using Klf4 Antibody (Center)(Cat. #AP21134a). AP21134a was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.



Western blot analysis of lysates from mouse small intestine, mouse testis tissue lysate (from left to right), using Klf4 Antibody (Center)(Cat. #AP21134a). AP21134a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.

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