

# Mouse Klf4 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AW5431

## Product Information

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<b>Application</b>	WB, FC
<b>Primary Accession</b>	<a href="#">Q60793</a>
<b>Reactivity</b>	Mouse
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	51880
<b>Isotype</b>	Rabbit IgG
<b>Antigen Source</b>	HUMAN

## Additional Information

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<b>Gene ID</b>	16600
<b>Antigen Region</b>	321-354
<b>Other Names</b>	Krueppel-like factor 4, Epithelial zinc finger protein EZF, Gut-enriched krueppel-like factor, Klf4, Ezf, Gklf, Zie
<b>Dilution</b>	WB~~1:1000 FC~~1:25
<b>Target/Specificity</b>	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.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	Mouse Klf4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	Klf4
<b>Synonyms</b>	Ezf, Gklf, Zie
<b>Function</b>	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

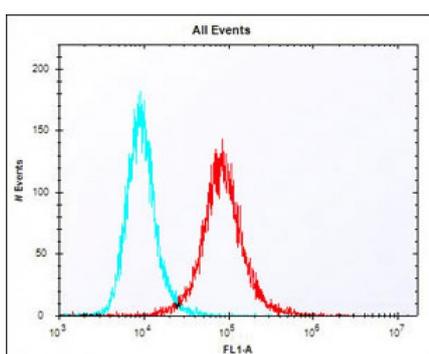
## Background

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

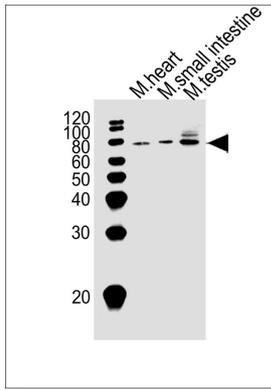
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Garrett-Sinha L.A., et al. *J. Biol. Chem.* 271:31384-31390(1996).  
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Chen Z.-Y., et al. *Exp. Cell Res.* 281:19-27(2002).  
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## Images



Overlay histogram showing NIH/3T3 cells stained with AW5431 (red line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AW5431, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) (1583138) at 1/400 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10<sup>6</sup> cells) used under the same conditions.

Acquisition of >10, 000 events was performed.



All lanes : Anti-Klf4 Antibody (Center) at 1:1000 dilution  
Lane 1: mouse heart lysates Lane 2: mouse small intestine lysates Lane 3: mouse testis lysates  
Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 52 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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