

## KLF4 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2725d

## Specification

# KLF4 Antibody (N-term) - Product Information

| Application       | WB,E             |
|-------------------|------------------|
| Primary Accession | <u>043474</u>    |
| Other Accession   | <u>NP_004226</u> |
| Reactivity        | Human            |
| Host              | Rabbit           |
| Clonality         | Polyclonal       |
| Isotype           | Rabbit IgG       |
| Antigen Region    | 20-53            |
|                   |                  |

# KLF4 Antibody (N-term) - 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 20-53 amino acids from the N-terminal region of human KLF4.

**Dilution** 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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### KLF4 Antibody (N-term) - Protein Information

Name KLF4 (<u>HGNC:6348</u>)

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**

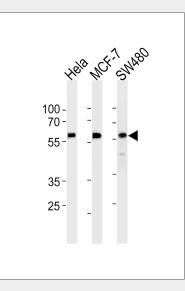
Nucleus {ECO:0000250|UniProtKB:Q60793}. Cytoplasm {ECO:0000250|UniProtKB:Q60793}

## KLF4 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### KLF4 Antibody (N-term) - Images



KLF4 Antibody (N-term) (Cat. #AP2725d) western blot analysis in Hela,MCF-7,SW480 cell line lysates (35ug/lane). This demonstrates the KLF4 antibody detected the KLF4 protein (arrow).

### KLF4 Antibody (N-term) - Background

Kruppel-like factor 4 (KLF4) is a transcription factor involved in both proliferation and differentiation in the colon. It is down-regulated in both mouse and human colonic adenomas and has been implicated as a tumor suppressor in the gut, whereas in breast cancer, KLF4 is an oncogene. KLF4 is also involved in reprogramming differentiated cells into pluripotent stem cells. KLF4 can act as a transcriptional activator or repressor, but the underlying mechanisms are poorly understood.



# KLF4 Antibody (N-term) - 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) **KLF4 Antibody (N-term) - Citations** 

- <u>MicroRNA-145 protects follicular granulosa cells against oxidative stress-induced apoptosis</u> by targeting Krüppel-like factor 4.
- MiR-32 promotes gastric carcinoma tumorigenesis by targeting Kruppel-like factor 4.
- Pluripotent stem cells derived from mouse and human white mature adipocytes.
- Regulation of the human HBA genes by KLF4 in erythroid cell lines.