

**KLF4 mAntibody (4G6E11)**  
**Mouse Monoclonal Antibody**  
**Catalog # ABV10903****Specification**

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**KLF4 mAntibody (4G6E11) - Product Information**

Application	WB, E
Primary Accession	<a href="#">O43474</a>
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Calculated MW	54671

**KLF4 mAntibody (4G6E11) - Additional Information****Gene ID 9314**

Positive Control  
Application & Usage

**Western Blot: Mouse liver tissue lysate**  
**Western Blot: 1 - 2 µg/ml, ELISA. However,**  
**the optimal conditions should be**  
**determined individually.**

**Other Names**

Kruppel-like factor 4, GKLF, EZF

**Target/Specificity**

KLF4

**Antibody Form**

Liquid

**Appearance**

Colorless liquid

**Formulation**

100 µg (1 mg/ml) in 1X PBS containing 0.02 % sodium azide.

**Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage**

-20 °C

**Background Descriptions****Precautions**

KLF4 mAntibody (4G6E11) is for research use only and not for use in diagnostic or therapeutic procedures.

## **KLF4 mAntibody (4G6E11) - 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}

## **KLF4 mAntibody (4G6E11) - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## **KLF4 mAntibody (4G6E11) - Images**

## **KLF4 mAntibody (4G6E11) - Background**

KLF4 is a transcription factor that functions as both a transcriptional activator and repressor to regulate proliferation and differentiation of multiple cell types. The role of KLF4 in embryonic development suggests that it might be useful in the creation of stem cells that might be useful in cell replacement therapies in the treatment of several degenerative diseases. Artificial stem cells, termed induced pluripotent stem (iPS) cells, can be created by expressing KLF4 and the transcription factors POU5F1, Sox2, and Lin28 along with c-Myc in mouse fibroblasts. More recently, experiments have demonstrated that iPS cells could be generated using expression plasmids expressing KLF4, Sox2, POU5F1 and c-Myc, eliminating the need for virus introduction, thereby addressing a safety concern for potential use of iPS cells in regenerative medicine. KLF4 interacts directly with POU5F1 and Sox2 in iPS and ES cells and activates the target gene NANOG.