

KLF4 mAntibody (4G6E11)

Mouse Monoclonal Antibody Catalog # ABV10903

Specification

KLF4 mAntibody (4G6E11) - Product Information

Application WB, E
Primary Accession O43474

Reactivity Human, Mouse

Host Mouse
Clonality Monoclonal
Isotype Mouse IgG1

Calculated MW 54671

KLF4 mAntibody (4G6E11) - Additional Information

Gene ID 9314

Positive Control Western Blot: Mouse liver tissue lysate Application & Usage 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 Cytomety
- 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 s µggested 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.