

KLF4 Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1457a

Specification

KLF4 Antibody - Product Information

Application WB, IHC, IF
Primary Accession O43474
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype IgG1
Calculated MW 54kDa KDa

Description

Kruppel-like factor 4 (gut), endothelial Kruppel-like zinc finger protein. May act as a transcriptional activator. Binds the CACCC core sequence. May be involved in the differentiation of epithelial cells and may also function in the development of the skeleton and kidney. KLF4 is highly expressed in the epithelial cells of the skin and the gastrointestinal tract.

Immunogen

Purified recombinant fragment of human KLF4 expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

KLF4 Antibody - Additional Information

Gene ID 9314

Other Names

Krueppel-like factor 4, Epithelial zinc finger protein EZF, Gut-enriched krueppel-like factor, KLF4, EZF, GKLF

Dilution

WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 IF~~1/200 - 1/1000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

KLF4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

KLF4 Antibody - 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 Antibody - Protocols

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

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

KLF4 Antibody - Images

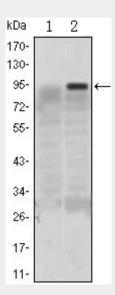


Figure 1: Western blot analysis using KLF4 mAb against HEK293 (1) and KLF4(AA: 2-180)-hlgGFc transfected HEK293 (2) cell lysate.



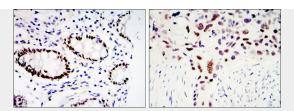


Figure 2: Immunohistochemical analysis of paraffin-embedded colon cancer tissues (left) and lung cancer tissues (right) using KLF4 mouse mAb with DAB staining

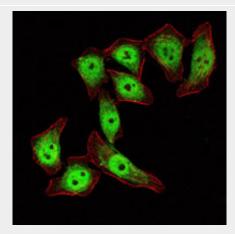


Figure 3: Immunofluorescence analysis of ECA109 cells using KLF4 mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

KLF4 Antibody - References

1. Mol Cell Proteomics. 2008 Mar;7(3):499-508. 2. J Cancer Res Clin Oncol. 2008 Aug;134(8):891-8.