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KLF4 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1457a

Product Information

Application	WB, IHC, ICC, E
Primary Accession	O43474
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	1E6
Isotype	IgG1
Calculated MW	54671
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.

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 ICC~~N/A E~~N/A
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.

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}

References

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

Images

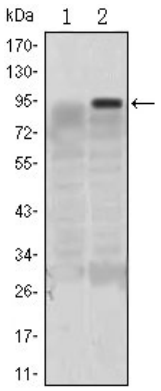

Figure 1: Western blot analysis using KLF4 mAb against HEK293 (1) and KLF4(AA: 2-180)-hIgGFc transfected HEK293 (2) cell lysate.

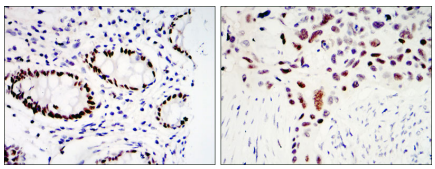

Figure 2: Immunohistochemical analysis of paraffin-embedded colon cancer tissues (left) and lung cancer tissues (right) using KLF4 mouse mAb with DAB staining

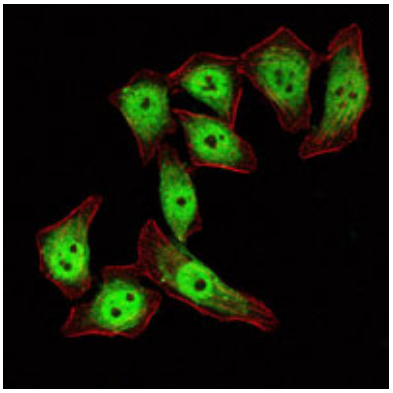

Figure 3: Immunofluorescence analysis of ECA109 cells using KLF4 mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.