

PRODUCT DATA SHEET

Bioworld Technology,Inc.

KLF4 monoclonal antibody

Catalog: MB66723 Host: Mouse Reactivity: Human

BackGround:

KLF4 is a member of the erythroid Kruppel-like factor (EKLF) multigene family that is highly expressed in the differentiating layers of the epidermis. KLF4 plays a critical role in the differentiation of epithelial cells and is essential for normal gastric homeostasis. Depending on the target gene, KLF4 can function as both a repressor and activator of transcription. Research studies suggest this protein may function as either a tumor suppressor or an oncogene depending on tumor type, with up-regulation in human squamous cell carcinoma of the head and neck and down-regulation in colorectal carcinoma. The in vitro reprogramming of somatic cells to an embryonic-like state has been achieved by retroviral transduction of four factors: Oct-3/4, Sox2, c-Myc, and KLF4. These induced pluripotent stem cells (iPS) are of great therapeutic interest as they exhibit the key characteristics and growth properties of pluripotent stem cells.

Product:

Mouse IgG2b kappa. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.

Molecular Weight:

~ 62 kDa

Swiss-Prot:

O43474

Purification&Purity:

This antibody is purified through a protein G column.

Applications:

WB (1/1000 - 1/2000)

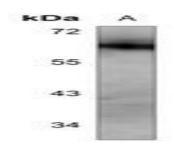
Storage&Stability:

Store at $4 \, \mathbb{C}$ short term. Aliquot and store at $-20 \, \mathbb{C}$ long term. Avoid freeze-thaw cycles.

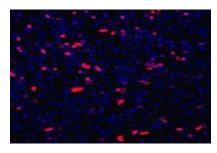
Specificity:

Recognizes endogenous levels of KLF4 protein.

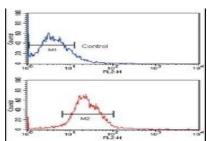
DATA:



Western blot analysis of KLF4 expression in recombincant protein (A) whole cell lysates.



Immunofluorescent analysis of KLF4 staining in Hela cells transfected with pMX constructs. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 $\,^\circ\!\!\mathrm{C}$ in a humidified chamber. Cells were washed with PBST and incubated with a AF594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).



Note:

For research use only, not for use in diagnostic procedure.

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