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Product datasheet for TA326714

KLF4 Mouse Monoclonal Antibody [Clone ID: 4G6E11]

Product data:

Product Type: Primary Antibodies

Clone Name: 4G6E11

Applications: WB

Recommend Dilution: WB: 1 ug/mL

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: KLF4 antibody was raised against a 20 amino acid synthetic peptide near the carboxy

terminus of human KLF4.

Formulation: KLF4 Monoclonal Antibody is supplied in PBS containing 0.02% sodium azide.

Concentration: 1 mg/ml

Purification: KLF4 Monoclonal Antibody is affinity chromatography purified via peptide column.

Gene Name: Kruppel-like factor 4 (gut)

Database Link: NP 004226 Entrez Gene 16600 MouseEntrez Gene 114505 RatEntrez Gene 9314 Human

Background: KLF4 Monoclonal Antibody: 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 suggested 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.

Synonyms: EZF; GKLF

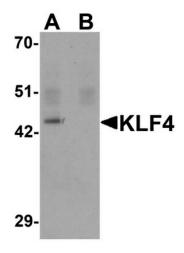




Protein Families:

Adult stem cells, Embryonic stem cells, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Transcription Factors

Product images:



Western blot analysis of KLF4 in mouse liver tissue lysate with KLF4 antibody at 1 ug/mL in (A) the absence and (B) the presence of blocking peptide.