KLF4 Monoclonal Antibody

Catalog No: #26048

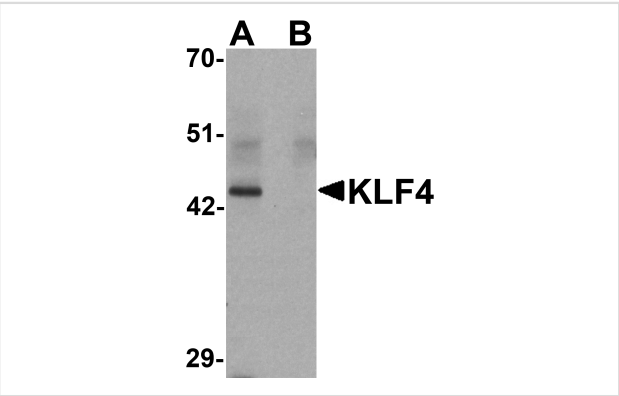
Package Size: #26048 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	KLF4 Monoclonal Antibody
Host Species	Mouse
Clonality	Monoclonal
Clone No.	mAb (Clone 4E5C3)
Purification	KLF4 Monoclonal Antibody is Protein A purified.
Applications	ELISA WB
Species Reactivity	Human;Mouse;Rat
Specificity	At least three isoforms of KLF4 are known to exist; this antibody will detect all three. KLF4 antibody will not cross-react with other Kruppel-like family members.
Immunogen Type	Peptide
Immunogen Description	Raised against a 20 amino acid peptide near the carboxy terminus of human KLF4.
Conjugates	Unconjugated
Target Name	KLF4
Other Names	Kruppel-like factor 4, GKLF, EZF
Accession No.	AAH30811
Concentration	1mg/ml
Formulation	Supplied in PBS containing 0.02% sodium azide.
Storage	Can be stored at -20°C, stable for one year.

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.

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 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.

Published Papers

Luo Zheng, Lu Xinru, Zhang Tianyi, Shi Shijie, Zhao Rui, He Yizhi, Yao Hanyue, Zhu Weina, Zhang Cairong el at., Moxibustion Enhances Ovarian Function by Inhibiting the Th17/ILβ • 17 Pathway and Regulating Gut Microbiota in POI Rats, American journal of reproductive immunology (New York, N.Y. : 1989), (2025)

PMID:40322835

Note: This product is for in vitro research use only and is not intended for use in humans or animals.