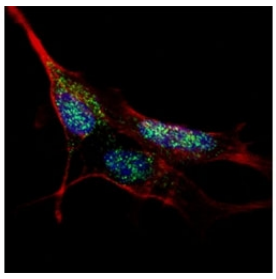
KLF4 Antibody (F48147)

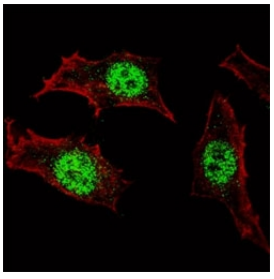
Catalog No.	Formulation	Size
F48147-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F48147-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

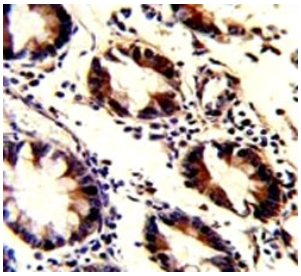
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	O43474
Applications	Western blot: 1:1000 Immunofluorescence: 1:10-1:50 IHC (Paraffin): 1:50-1:100
Limitations	This KLF4 antibody is available for research use only.



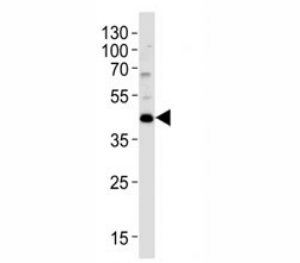
KLF4 Antibody SH-SY5Y Cell IF. Immunofluorescent staining of human SH-SY5Y cells using KLF4 antibody at a 1:1000 dilution. KLF4 was detected with a green fluorescent secondary antibody, while the actin cytoskeleton is shown in red and nuclei are counterstained in blue. KLF4 immunoreactivity is localized predominantly to the nuclei, consistent with its established role as a transcription factor regulating stem cell maintenance, epithelial differentiation, and gene expression. This KLF4 Antibody is suitable for studies of pluripotency, cellular reprogramming, transcriptional regulation, and cancer biology.



Fluorescent confocal image of HeLa cells stained with KLF4 antibody at 1:100. Immunoreactivity is localized specifically to the nuclei.



IHC analysis of FFPE human colon carcinoma with KLF4 antibody



Western blot analysis of lysate from HT29 cell line using KLF4 antibody; Ab was diluted at 1:1000. Predicted molecular weight: 50-60 kDa + possible ~75 kDa (phosphorylated form).

Description

KLF4 Antibody detects Kruppel-like factor 4, a zinc finger transcription factor encoded by the KLF4 gene. KLF4 binds GC-rich regulatory sequences and can activate or repress genes involved in proliferation, differentiation, apoptosis, and tissue homeostasis. Its activity is influenced by cellular context, interacting proteins, and post-translational regulation.

KLF4 is expressed in several epithelial tissues, including the skin and gastrointestinal tract, where it contributes to terminal differentiation and maintenance of epithelial integrity. It also participates in cellular reprogramming, vascular biology, inflammatory signaling, and responses to cellular stress. Altered KLF4 expression has been reported in multiple cancers, where the protein may display tumor-suppressive or oncogenic activity depending on the tissue and molecular environment.

Researchers use a KLF4 Antibody to examine protein expression and nuclear localization in normal tissues, cultured cells, and disease models. KLF4 detection can support investigations of transcriptional regulation, epithelial biology, development, cancer progression, and cellular plasticity. A KLF4 Antibody is therefore a useful reagent for studying the diverse biological processes controlled by this context-dependent transcription factor.

Learn more about KLF4 biology and its role as a stem cell-associated transcription factor by visiting our KLF4 Antibody / Stem Cell Transcription Factor Antibody page.

Application Notes

Titration of the KLF4 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

This KLF4 antibody was produced from rabbits immunized with a his tag recombinant protein of human KLF4.

Storage

Aliquot the KLF4 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Copyright © NSJ Bioreagents. All rights reserved.