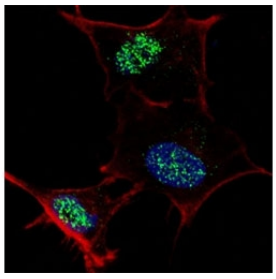
KLF4 Antibody for IF (F48148)

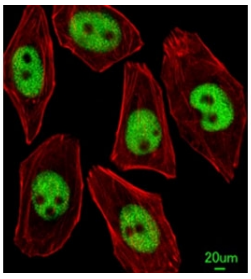
Catalog No.	Formulation	Size
F48148-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F48148-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

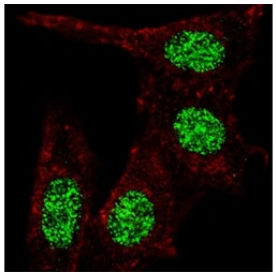
Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	O43474
Applications	Western blot: 1:1000 Immunofluorescence: 1:10-1:50
Limitations	This KLF4 Antibody for IF is available for research use only.



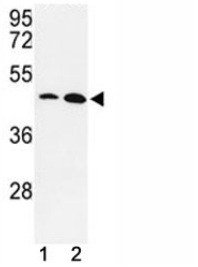
KLF4 Antibody SH-SY5Y Cell IF. Immunofluorescent staining of fixed and permeabilized human SH-SY5Y neuroblastoma cells using KLF4 Antibody for IF at a 1:100 dilution. KLF4 immunoreactivity (green) is highly enriched within the nuclei, while the actin cytoskeleton is labeled in red and nuclei are counterstained with DAPI (blue). The staining pattern is consistent with the expected nuclear localization of this transcription factor. This KLF4 Antibody for IF is suitable for studies of nuclear protein localization, transcriptional regulation, stem cell biology, and neuronal cell research.



KLF4 Antibody U251 Cell IF. Immunofluorescent staining of fixed and permeabilized human U251 glioma cells using KLF4 Antibody for IF at a 1:25 dilution. Alexa Fluor 488-conjugated goat anti-rabbit IgG was used as the secondary antibody (green), while F-actin was counterstained with DyLight Fluor 554-conjugated phalloidin (red). KLF4 staining is predominantly localized to the nuclei, consistent with its function as a transcription factor. This KLF4 Antibody for IF is suitable for studies of nuclear localization, transcriptional regulation, stem cell biology, and cancer cell signaling.



KLF4 Antibody HeLa Cell IF. Immunofluorescent staining of fixed and permeabilized human HeLa cells using KLF4 Antibody for IF at a 1:100 dilution. KLF4 immunoreactivity (green) is specifically localized to the nuclei with minimal cytoplasmic staining, consistent with the expected localization of this transcription factor. The actin cytoskeleton is shown in red, highlighting the clear nuclear distribution of the target protein. This KLF4 Antibody for IF is suitable for studies of nuclear protein localization, transcriptional regulation, stem cell biology, and cancer cell research.



Western blot analysis of KLF4 antibody and MDA-MB231, NCI-H460 lysate. Predicted molecular weight: 50-60 kDa + possible ~75 kDa (phosphorylated form).

Description

KLF4 Antibody for IF is designed for immunofluorescence studies examining the cellular localization of Kruppel-like factor 4, a zinc finger transcription factor that regulates epithelial differentiation, stem cell maintenance, cellular reprogramming, and gene expression. Immunofluorescence enables visualization of KLF4 within individual cells while preserving cellular morphology, making it well suited for studies of protein localization, expression patterns, and changes induced by experimental treatments. Researchers commonly use KLF4 Antibody for IF to investigate nuclear localization and cell type-specific expression in cultured cells.

KLF4 functions primarily within the nucleus, where it binds GC-rich DNA regulatory elements and controls transcriptional programs involved in proliferation, differentiation, apoptosis, and maintenance of cellular identity. As one of the Yamanaka reprogramming factors, KLF4 also plays a well-established role in induced pluripotent stem cell generation and stem cell biology. Immunofluorescence provides an effective approach for confirming the predominantly nuclear distribution of KLF4 while allowing co-localization studies with nuclear, cytoskeletal, or lineage-specific markers.

Changes in KLF4 localization or expression have been reported during epithelial differentiation, tissue regeneration, cellular stress responses, and cancer progression. Immunofluorescence can therefore complement other analytical methods by revealing spatial expression patterns that are not readily appreciated by bulk protein analysis. A KLF4 Antibody for IF is a valuable research tool for investigating nuclear protein localization, stem cell biology, transcriptional regulation, epithelial differentiation, and cancer-associated cellular processes.

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 for IF may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 481-504 from the human protein was used as the immunogen for this KLF4 antibody.

Storage

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

Alternate Names

KLF4 antibody for IF, KLF4 antibody for immunofluorescence, Kruppel-like Factor 4 antibody for IF, Stem Cell Transcription Factor antibody for IF

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