

## Anti-KLF4 Polyclonal Antibody

### Product Details

Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Molecular Weight:	Theoretical: 56 kDa. Actual: 50 kDa.
Purification:	Protein A purified

### Applications

1. Paraformaldehyde-fixed, paraffin embedded (Rat lung); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (KLF4) Polyclonal Antibody, Unconjugated (TMAB-01026) at 1:400 overnight at 4°C, followed by a conjugated secondary for 20 min and DAB staining.
2. Blank control: MCF7 (blue). Primary Antibody: Rabbit Anti-KLF4 AF647 Conjugated antibody (TMAB-01026-AF647), Dilution: 1 µg in 100 µL 1X PBS containing 0.5% BSA; Isotype Control Antibody: Rabbit IgG/AF647 (orange),used under the same conditions.

#### Protocol

The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice. The cells were washed twice with 1 X PBS. The cells were incubated in 1 X PBS containing 0.5% BSA + 10% goat serum (15 min) to block non-specific protein-protein interactions followed by the incubated with antibody (TMAB-01026-AF647, 1 µg/1x10<sup>6</sup> cells) for 30 min on ice.

3. Sample: 293T (human) cell Lysate at 40 µg  
 Primary: Anti-KLF4 (TMAB-01026) at 1/300 dilution  
 Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution  
 Predicted band size: 56 kDa  
 Observed band size: 60 kDa

#### Verified Activity:

4. Blank control: K562. Primary Antibody (green line): Rabbit Anti-KLF4 antibody (TMAB-01026) Dilution: 1 µg/10<sup>6</sup> cells;  
 Isotype Control Antibody (orange line): Rabbit IgG.  
 Secondary Antibody: Goat anti-rabbit IgG-FITC  
 Dilution: 1 µg/test.

#### Protocol

The cells were fixed with 4% PFA (10 min at room temperature) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature.

#### 5. Sample:

- Hela Cell (Human) lysate at 30 µg  
 Primary: Anti-KLF4 (TMAB-01026) at 1/300 dilution  
 Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution  
 Predicted band size: 56 kDa  
 Observed band size: 56 kDa

#### 6. Sample:

- Lane 1: Mouse NIH/3T3 cell lysates

Lane 2: Human A431 cell lysates

Lane 3: Human LOVO cell lysates

Lane 4: Human HeLa cell lysates

Lane 5: Human MCF-7 cell lysates

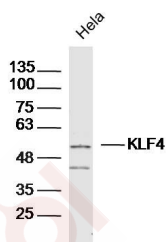
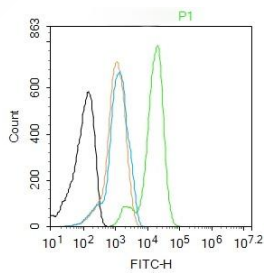
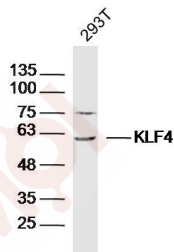
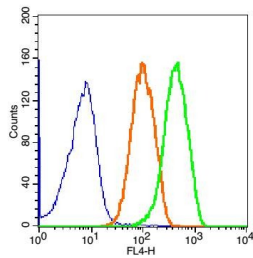
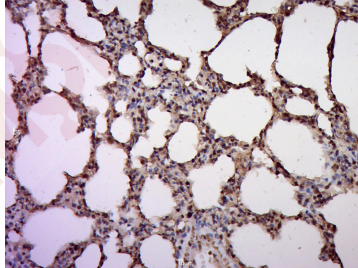
Lane 6: Human A549 cell lysates

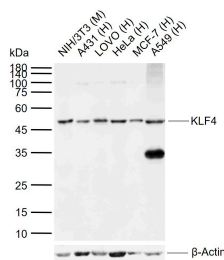
Primary: Anti-KLF4 (TMAB-01026) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 56 kDa

Observed band size: 50 kDa





Application: FCM,ICC/IF,IF,IHC-Fr,IHC-P,WB

Recommended FCM=1 µg/Test; ICC/IF=1:100-500; IF=1:50-200; IHC-Fr=1:50-200; IHC-P=1:50-200; WB=1:500-2000

## Properties

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

## Antigen Details

Immunogen: KLH conjugated synthetic peptide: human KLF4

Antigen Species: Human

Gene ID: 9314

Uniprot ID: O43474

Synonyms: Krueppel-like factor 4;KLF 4;GKLF;EZF;Gut-enriched krueppel-like factor;Epithelial zinc finger protein EZF

Biology Area: Transcription factors,Tumor suppressors,Endothelial Cell Markers,Transcription factors,Surface molecules,Cell Cycle Inhibitors,Cell Differentiation,Krueppel like factor,Krueppel like factor, Other factors,Transcription Factors,Intracellular

## Research Background

KLF4 is a transcription factor that works with Sp1 to activate the Laminin gamma1 chain gene. It binds the CACCC core sequence. KLF4 may be involved in the differentiation of epithelial cells and may also function in the development of the skeleton and kidney. KLF4 also has roles as both an oncogene and a tumor suppressor.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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