

For Research Use Only

# KLF4 Polyclonal antibody

Catalog Number: 11880-1-AP

Featured Product

156 Publications



## Basic Information

### Catalog Number:

11880-1-AP

### Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG2480

### GenBank Accession Number:

BC030811

### GeneID (NCBI):

9314

### UNIPROT ID:

O43474

### Full Name:

Kruppel-like factor 4 (gut)

### Calculated MW:

504 aa, 54 kDa

### Observed MW:

50-60 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:1000-1:8000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF/ICC: 1:20-1:200

FC (Intra): 0.40 ug per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, ChIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB:** A431 cells, A549 cells, HUVEC cells, NCCIT cells, HEK-293 cells, HT-29 cells, C2C12 cells, HT-1080 cells, HeLa cells, mouse liver tissue, mouse lung tissue

**IP:** HeLa cells,

**IHC:** mouse embryo tissue, human tonsil tissue, human spleen tissue, human colon tissue

**IF/ICC:** human embryonic stem cells,

**FC (Intra):** HeLa cells,

## Background Information

The mammalian Krüppel-like transcription factor 4 (Klf4) is an evolutionarily conserved zinc finger-containing transcription factor with diverse regulatory functions in cell growth, proliferation, differentiation and embryogenesis. It also plays a significant role in the process of tumorigenesis. Klf4 is one of the key transcription factors that have been used to reprogram mouse and human fibroblasts to a pluripotent state also called induced pluripotent stem (iPS) cells. Affinity purified rabbit anti-Klf4 is for the detection of Klf4 transgene expression in the process of reprogramming. There are two isoforms of KLF4 (PMID: 15561714), with MW range from 50 to 60 kDa, and major band is 55 kDa. KLF4 protein can be ubiquitin modified.

## Notable Publications

Author	Pubmed ID	Journal	Application
Martin Degen	33117810	Front Cell Dev Biol	WB
Shuang Li	30269953	Stem Cell Reports	WB
Xinjian Zhang	28888043	J Cell Biochem	WB,IF

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

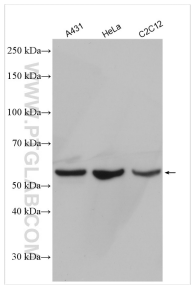
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

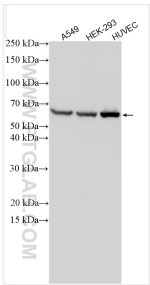
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

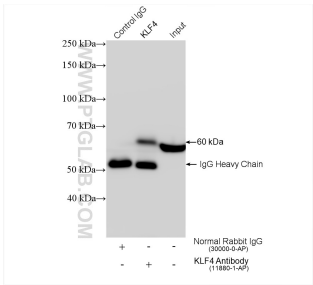
Selected Validation Data



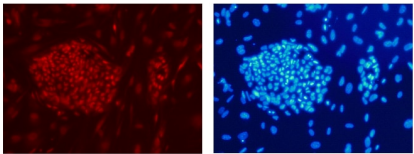
Various lysates were subjected to SDS PAGE followed by western blot with 11880-1-AP (KLF4 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 11880-1-AP (KLF4 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.

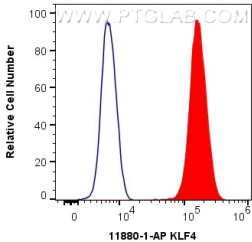


IP result of anti-KLF4 (IP:11880-1-AP, 4ug; Detection:11880-1-AP 1:8000) with HeLa cells lysate 1320 ug.

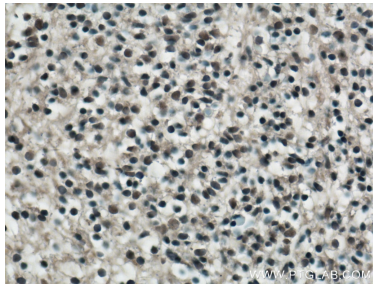


Confocal immunofluorescent analysis of human embryonic stem cells with 11880-1-AP at dilution of 1:50. The PE shows staining with 11880-1-AP/PE. The DAPI shows nuclear staining by DAPI.

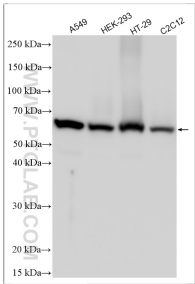
Confocal immunofluorescent analysis of human embryonic stem cells with 11880-1-AP at dilution of 1:50. The PE shows staining with 11880-1-AP/PE. The DAPI shows nuclear staining by DAPI.



1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human KLF4 (11880-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunohistochemical analysis of paraffin-embedded mouse embryo tissue slide using 11880-1-AP (KLF4 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Various lysates were subjected to SDS PAGE followed by western blot with 11880-1-AP (KLF4 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.