

For Research Use Only

# KLF4 Polyclonal antibody

Catalog Number: 11880-1-AP

Featured Product

151 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

## 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,

## 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

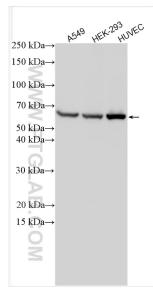
For technical support and original validation data for this product please contact:

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

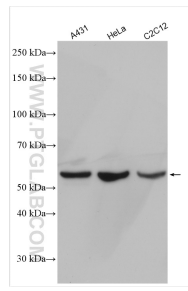
E: proteintech@ptglab.com  
W: ptglab.com

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

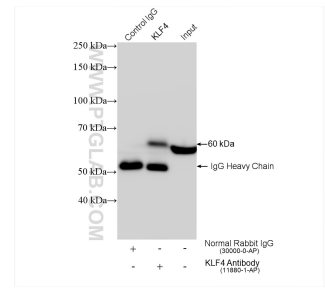
## Selected Validation Data



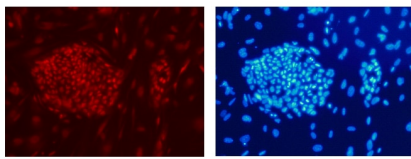
Various lysates were subjected to SDS PAGE followed by western blot with 11880-1-AP (KLF4 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



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

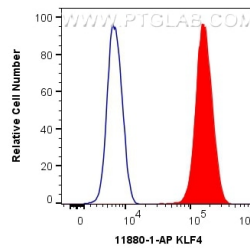


IP result of anti-KLF4 (IP:11880-1-AP, 4ug; Detection:11880-1-AP 1:8000) with HeLa cells lysate 1320 ug.

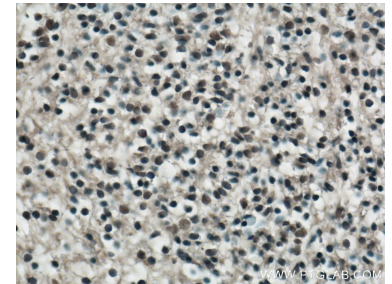


Confocal immunofluorescent analysis of human embryonic stem cells with 11880-1-AP at dilution of 1:50. The PE shows staining with 11880-1-AP/PE. The DAPI shows nuclear staining by DAPI.

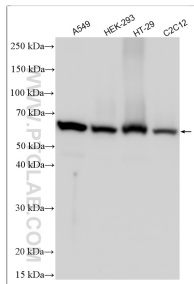
Confocal immunofluorescent analysis of human embryonic stem cells with 11880-1-AP at dilution of 1:50. The PE shows staining with 11880-1-AP/PE. The DAPI shows nuclear staining by DAPI.



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.