

For Research Use Only

KLF4 Polyclonal antibody

Catalog Number: 11880-1-AP

Featured Product

149 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

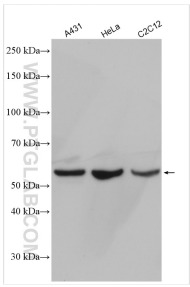
For technical support and original validation data for this product please contact:

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

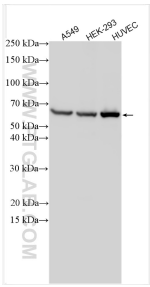
E: proteintech@ptglab.com
W: ptglab.com

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

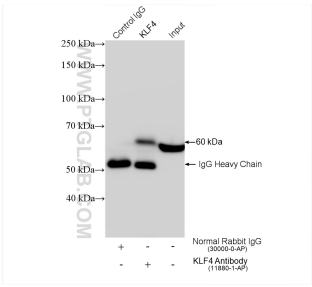
Selected Validation Data



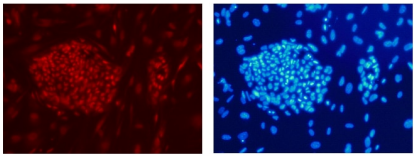
Various lysates were subjected to SDS PAGE followed by western blot with 11880-1-AP (KLF4 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



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.

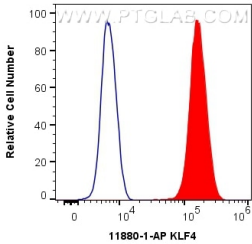


IP result of anti-KLF4 (IP:11880-1-AP, 4ug; Detection:11880-1-AP 1:8000) with HeLa cells lysate 1320 ug.

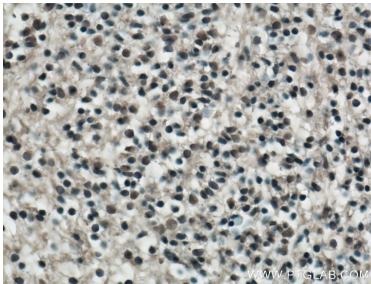


Confocal immunofluorescent analysis of human embryonic stem cells with 11880-1-AP at dilution of 1:50. The PE shows staining with 11880-1-AP/PE. The DAPI shows nuclear staining by DAPI.

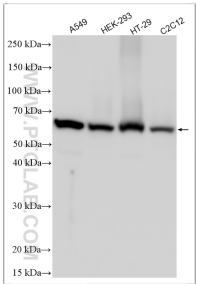
Confocal immunofluorescent analysis of human embryonic stem cells with 11880-1-AP at dilution of 1:50. The PE shows staining with 11880-1-AP/PE. The DAPI shows nuclear staining by DAPI.



1X10⁶ 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.