

For Research Use Only

# FOXO1 Polyclonal antibody

Catalog Number: 18592-1-AP

Featured Product

116 Publications



## Basic Information

**Catalog Number:**

18592-1-AP

**Size:**

600 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG13296

**GenBank Accession Number:**

BC021981

**GeneID (NCBI):**

2308

**UNIPROT ID:**

Q12778

**Full Name:**

forkhead box O1

**Calculated MW:**

655 aa, 70 kDa

**Observed MW:**

70-80 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:1000-1:8000

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

IHC 1:1000-1:4000

IF 1:200-1:800

## Applications

**Tested Applications:**

FC, IF/ICC, IHC, IP, WB, ELISA

**Cited Applications:**

WB, IP, IHC, IF, CHIP

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human, rat, sheep, mouse, pig

**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:** DU 145 cells, HEK-293T cells, HepG2 cells, SGC-7901 cells, mouse brain tissue, rat brain tissue, mouse kidney tissue

**IP:** HepG2 cells,

**IHC:** human kidney tissue,

**IF:** HeLa cells,

## Background Information

FOXO1, also named as FOXO1A, FKHR and FKHL1, is a member of the FOXO subfamily of Forkhead transcription factors. FOXO1 is a transcription factor which acts as a regulator of cell responses to oxidative stress. FOXO1 interacts with LRPPRC and SIRT1. In the presence of KIRT1, FOXO1 mediates down-regulation of cyclin D1 and up-regulation of CDKN1B levels which are required for cell transition from proliferative growth to quiescence. FOXO1 contains three predicted protein kinase B phosphorylation sites (Thr-24, Ser-256, and Ser-319) that are conserved in other FOXO proteins. The t(2;13) and the variant t(1;13) translocations generate PAX3/FKHR and PAX7/FKHR fusion proteins respectively. The resulting protein is a transcriptional activator. Defects in FOXO1 are a cause of rhabdomyosarcoma type 2 (RMS2).

## Notable Publications

Author	Pubmed ID	Journal	Application
Xiaoyan Liu	31574948	Int J Mol Sci	WB
Duobin Zhang	34585441	J Leukoc Biol	WB
Linyi Shu	34581420	Int J Mol Med	WB

## Storage

**Storage:**

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

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

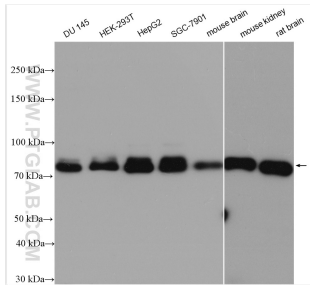
T: 4006900926

E: Proteintech-CN@ptglab.com

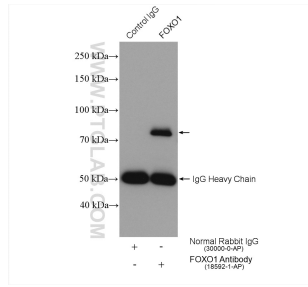
W: ptgcn.com

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

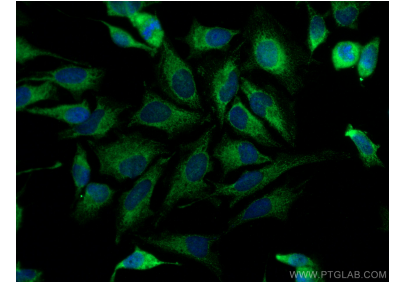
## Selected Validation Data



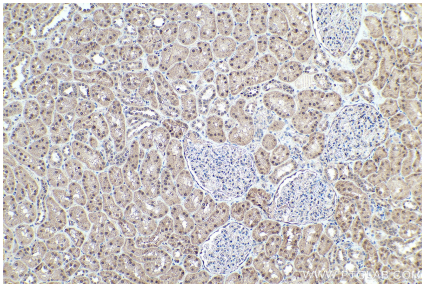
Various lysates were subjected to SDS PAGE followed by western blot with 18592-1-AP (FOXO1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



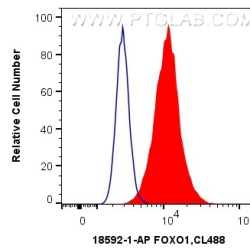
IP result of anti-FOXO1 (IP:18592-1-AP, 4ug; Detection:18592-1-AP 1:2000) with HepG2 cells lysate 960 ug.



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using FOXO1 antibody (18592-1-AP) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 18592-1-AP (FOXO1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human FOXO1 (18592-1-AP) and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).