

For Research Use Only

FOXO1 Polyclonal antibody

Catalog Number: 18592-1-AP

Featured Product

156 Publications



Basic Information

Catalog Number:

18592-1-AP

Size:

150ul, Concentration: 600 ug/ml by Nanodrop;

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 ug for 1.0-3.0 mg of total protein lysate

IHC 1:1000-1:4000

IF/ICC 1:200-1:800

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, pig, sheep

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/ICC: 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, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

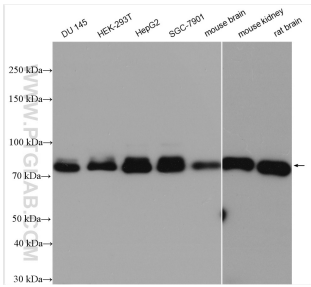
For technical support and original validation data for this product please contact:

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

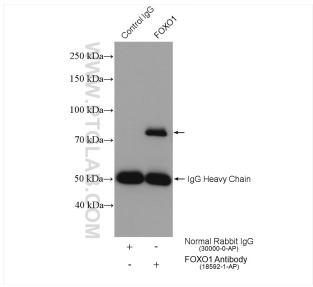
E: proteintech@ptglab.com
W: ptglab.com

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

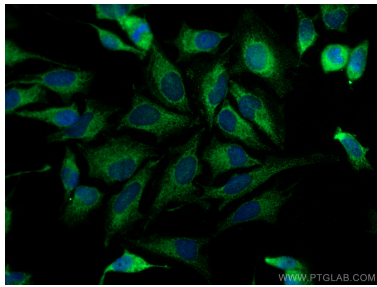
Selected Validation Data



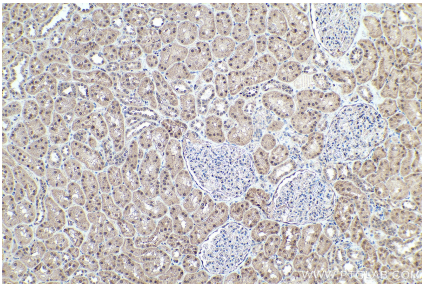
Various lysates were subjected to SDS PAGE followed by western blot with 18592-1-AP (FOXO1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



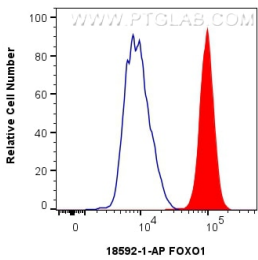
IP result of anti-FOXO1 (IP:18592-1-AP, 4ug; Detection:18592-1-AP 1:2000) with HepG2 cells lysate 960 ug.



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).



1x10⁶ Daudi cells were intracellularly stained with 0.4 ug FOXO1 Polyclonal antibody (18592-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.4 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).