

For Research Use Only

FOXO1 Polyclonal antibody

Catalog Number: 18592-1-AP

Featured Product

157 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 FKH1, 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

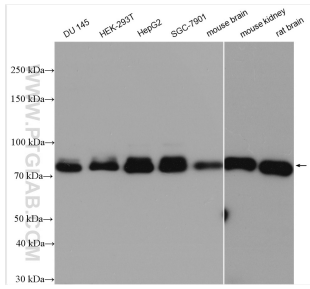
For technical support and original validation data for this product please contact:

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

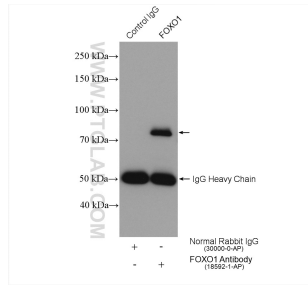
E: proteintech@ptglab.com
W: ptglab.com

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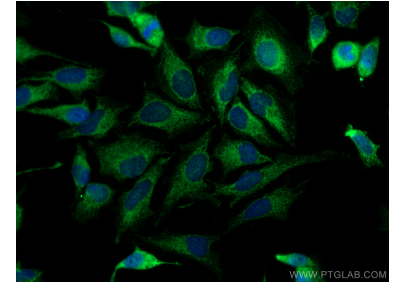
Selected Validation Data



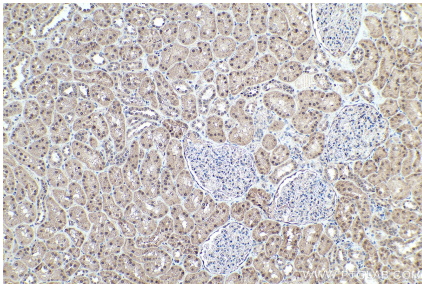
Various lysates were subjected to SDS PAGE followed by western blot with 18592-1-AP (FOXO1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



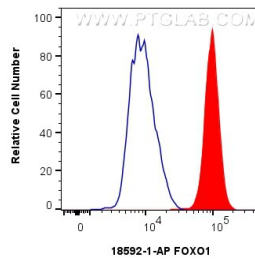
IP result of anti-FOXO1 (IP:18592-1-AP, 4 μ g; Detection:18592-1-AP 1:2000) with HepG2 cells lysate 960 μ g.



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