

For Research Use Only

FOXO3A Polyclonal antibody

Catalog Number: 10849-1-AP

Featured Product

88 Publications



Basic Information

Catalog Number:

10849-1-AP

Size:

150ul, Concentration: 800 µg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1289

GenBank Accession Number:

BC021224

GeneID (NCBI):

2309

UNIPROT ID:

O43524

Full Name:

forkhead box O3

Calculated MW:

673 aa, 71 kDa

Observed MW:

72-97 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:2000-1:10000

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

IHC 1:50-1:200

Applications

Tested Applications:

WB, IP, IHC, ELISA

Cited Applications:

WB, IP, IF, IHC, CoIP

Species Specificity:

human, mouse, rat

Cited Species:

human, rat, mouse, pig, bovine

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: HEK-293 cells, HeLa cells, Jurkat cells, MCF-7 cells, Neuro-2a cells, PC-3 cells

IP: HEK-293 cells,

IHC: human breast cancer tissue, human prostate cancer tissue

Background Information

In mammalian cells, FoxO factors act as potent transcriptional activators that upregulate the expression of programs of genes involved in stress resistance, cell cycle arrest, differentiation, apoptosis, autophagy, and metabolism. FOXO3 has a key role in the maintenance of adult neural and hematopoietic stem cells. It also associates with extreme longevity in humans and regulates the homeostasis of adult stem cell pools in mammals, which may contribute to longevity. Phosphorylation inhibits FOXO3 nuclear translocation that is essential for its regulation and function. The calculated molecular weight of FOXO3 is 71 kDa, but some experiments analysis using a FOXO3a specific antibody showed the expression of a 90 kDa fulllength FOXO3a protein (Full) and a 40 kDa processed FOXO3a product (Short). 90 kDa FOXO3a protein is a phosphorylated via activation of PI3K (phosphatidylinositol 3-kinase) and Akt after INS stimulation, and translocate from the nucleus to the cytoplasm. (PMID: 19427386)

Notable Publications

Author	Pubmed ID	Journal	Application
Yong-Li Zhang	34679694	Antioxidants (Basel)	WB
Yitong Zhao	36156740	J Bone Miner Metab	WB,IHC
Xian Ye	32946432	Med Sci Monit	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

*** 20ul sizes contain 0.1% BSA

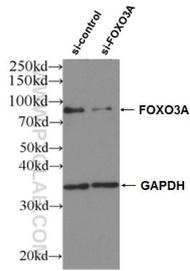
For technical support and original validation data for this product please contact:

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

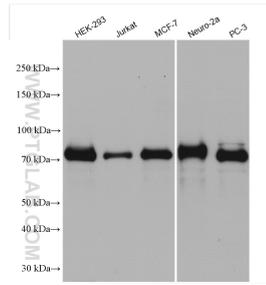
E: proteintech@ptglab.com
W: ptglab.com

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

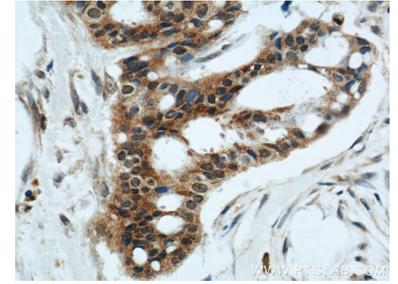
Selected Validation Data



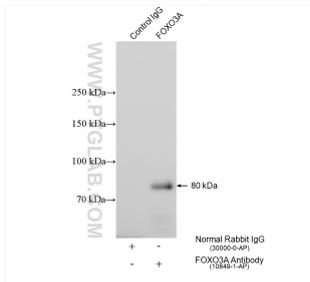
WB result of FOXO3A antibody (10849-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-FOXO3A transfected HEK-293 cells.



Various lysates were subjected to SDS PAGE followed by western blot with 10849-1-AP (FOXO3A antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human breast cancer using 10849-1-AP (FOXO3A antibody) at dilution of 1:50 (under 40x lens).



IP result of anti-FOXO3A (IP:10849-1-AP, 4ug; Detection:10849-1-AP 1:8000) with HEK-293 cells lysate 920 ug.