

For Research Use Only

FOXO3A Polyclonal antibody

Catalog Number: 10849-1-AP

Featured Product

30 Publications



Basic Information

Catalog Number:

10849-1-AP

Size:

150UL, Concentration: 353 µg/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1289

GenBank Accession Number:

BC021224

GeneID (NCBI):

2309

Full Name:

forkhead box O3

Calculated MW:

673 aa, 71 kDa

Observed MW:

72-97 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:2000

IHC 1:50-1:200

IF 1:10-1:100

Applications

Tested Applications:

IF, IHC, WB, ELISA

Cited Applications:

IF, IHC, IP, WB

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, pig, 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: Jurkat cells, HeLa cells, PC-3 cells, HEK-293 cells

IHC: human breast cancer tissue, human prostate cancer tissue

IF: HeLa cells, SH-SY5Y cells

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
Xian Ye	32946432	Med Sci Monit	WB
Dandan Wang	32913121	J Biol Chem	WB
Jun Tian	33063244	Neurochem Res	WB

Storage

Storage:

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

Storage Buffer:

PBS with 0.1% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

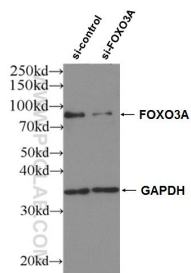
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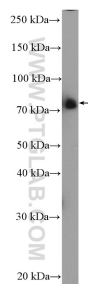
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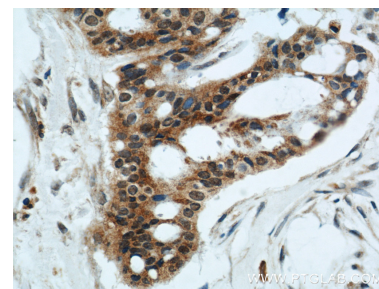
Selected Validation Data



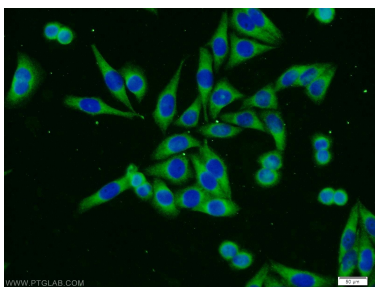
WB result of FOXO3A antibody (10849-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-FOXO3A transfected HEK-293 cells.



Jurkat cells were subjected to SDS PAGE followed by western blot with 10849-1-AP (FOXO3A antibody) at dilution of 1:1000 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).



Immunofluorescent analysis of HeLa cells using 10849-1-AP (FOXO3A antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).