

For Research Use Only

# FOXO3A Monoclonal antibody, PBS Only



Catalog Number: 66428-1-PBS

Featured Product

## Basic Information

Catalog Number:

66428-1-PBS

Size:

1 mg/ml

Source:

Mouse

Isotype:

IgG2a

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:

85-90 kDa

Purification Method:

Protein A purification

CloneNo.:

1F12D11

## Applications

Tested Applications:

WB,IP,Indirect ELISA,IHC,IF

Species Specificity:

human, mouse, rat

## 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)

## Storage

Storage:

Store at -80°C.

Storage Buffer:

PBS Only

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

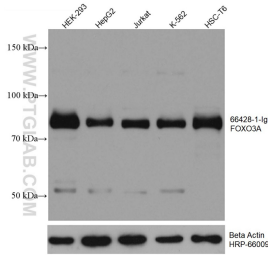
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

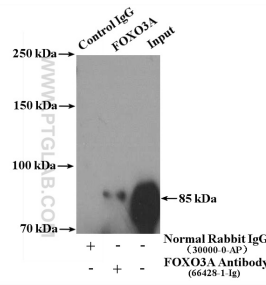
W: [ptgcn.com](http://ptgcn.com)

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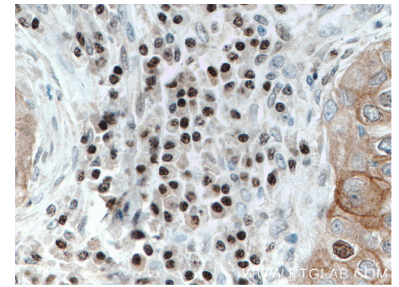
## Selected Validation Data



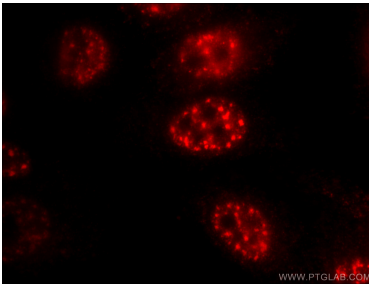
Various lysates were subjected to SDS PAGE followed by western blot with 66428-1-Ig (FOXO3A antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Beta Actin Monoclonal antibody (HRP-66009) as loading control. This data was developed using the same antibody clone with 66428-1-PBS in a different storage buffer formulation.



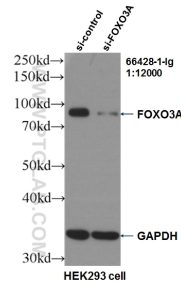
IP result of anti-FOXO3A (IP:66428-1-Ig, 4ug; Detection:66428-1-Ig 1:1000) with HEK-293 cells lysate 2200 ug. This data was developed using the same antibody clone with 66428-1-PBS in a different storage buffer formulation.



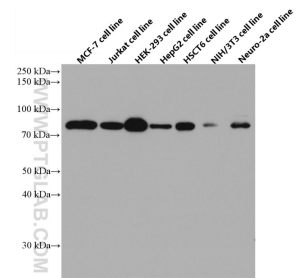
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue using 66428-1-Ig (FOXO3A antibody) at dilution of 1:500 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66428-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using 66428-1-Ig (FOXO3A antibody) at dilution of 1:50 and Alexa Fluor 594-conjugated AffiniPure Goat Anti-mouse IgG(H+L). This data was developed using the same antibody clone with 66428-1-PBS in a different storage buffer formulation.



WB result of FOXO3A antibody (66428-1-Ig, 1:12,000) with si-Control and si-FOXO3A transfected HEK293 cells. This data was developed using the same antibody clone with 66428-1-PBS in a different storage buffer formulation.



Various lysates were subjected to SDS PAGE followed by western blot with 66428-1-Ig (FOXO3A antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66428-1-PBS in a different storage buffer formulation.