

For Research Use Only

# Phospho-FOXO3A (Ser315) Polyclonal antibody



Catalog Number: 28755-1-AP **5 Publications**

## Basic Information

<b>Catalog Number:</b> 28755-1-AP	<b>GenBank Accession Number:</b> BC021224	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 550 µg/ml	<b>GeneID (NCBI):</b> 2309	<b>Recommended Dilutions:</b> WB 1:500-1:2000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> O43524	
<b>Isotype:</b> IgG	<b>Full Name:</b> forkhead box O3	
	<b>Calculated MW:</b> 673 aa, 71 kDa	
	<b>Observed MW:</b> 80-90 kDa	

## Applications

<b>Tested Applications:</b> WB, ELISA	<b>Positive Controls:</b> WB : Calyculin A treated PC-3 cells,
<b>Cited Applications:</b> WB	
<b>Species Specificity:</b> Human, mouse, rat	
<b>Cited Species:</b> human, rat, mouse	

## 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 full length 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). IKKBE directly activates Akt and that Akt inhibits FOXO3a by phosphorylation of Ser32, Ser253 and Ser315.

## Notable Publications

Author	Pubmed ID	Journal	Application
Jing Zhang	34655600	Exp Cell Res	
Zhi Zuo	37922559	Phytother Res	WB
He Shuangshuang	37865276	J Ethnopharmacol	WB

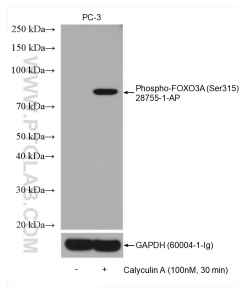
## Storage

**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

For technical support and original validation data for this product please contact:  
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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

## Selected Validation Data



Non-treated PC-3 and Calyculin A treated PC-3 cells were subjected to SDS PAGE followed by western blot with 28755-1-AP (Phospho-FOXO3A (Ser315) antibody) at dilution of 1:1000 incubated at 4°C overnight. The membrane was stripped and re-blotted with GAPDH antibody as loading control.