

For Research Use Only

# FOXO1 Recombinant antibody

Catalog Number: 82997-1-RR **1 Publications**



## Basic Information

<b>Catalog Number:</b> 82997-1-RR	<b>GenBank Accession Number:</b> BC021981	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 2308	<b>CloneNo.:</b> 230183D1
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q12778	<b>Recommended Dilutions:</b> WB 1:2000-1:10000 IHC 1:50-1:500 IF/ICC 1:200-1:800
<b>Isotype:</b> IgG	<b>Full Name:</b> forkhead box O1	
<b>Immunogen Catalog Number:</b> AG13296	<b>Calculated MW:</b> 655 aa, 70 kDa	
	<b>Observed MW:</b> 70-80 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, FC (Intra), ELISA	<b>Positive Controls:</b> WB : A549 cells, HepG2 cells, HEK-293 cells, MCF-7 cells IHC : human pancreas cancer tissue, IF/ICC : HepG2 cells,
<b>Cited Applications:</b> WB	
<b>Species Specificity:</b> human	
<b>Cited Species:</b> human	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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
Weihuan Hu	37567425	J Ethnopharmacol	WB

## Storage

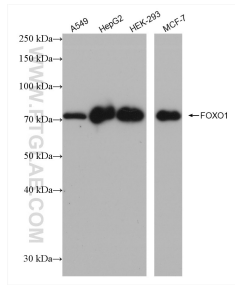
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

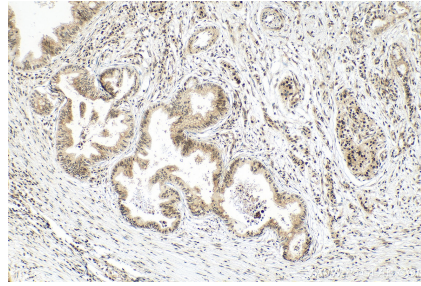
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

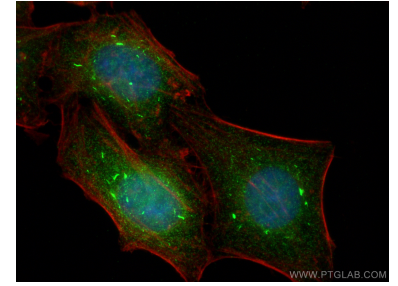
## Selected Validation Data



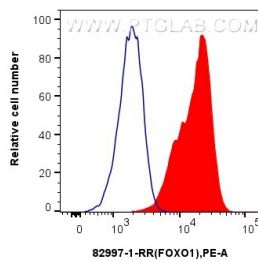
Various lysates were subjected to SDS PAGE followed by western blot with 82997-1-RR (FOXO1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



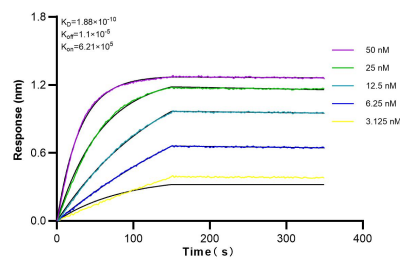
Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 82997-1-RR (FOXO1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using FOXO1 antibody (82997-1-RR, Clone: 230183D1) at dilution of 1:400 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002), CL594-phalloidin (red).



$1 \times 10^6$  A431 cells were intracellularly stained with 0.25 µg FOXO1 Recombinant antibody (82997-1-RR, Clone: 230183D1) and PE-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 µg Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Biolayer interferometry (BLI) kinetic assays of 82997-1-RR against Human FOXO1 were performed. The affinity constant is 0.188 nM.