

Basic Information

Product Name	Anti-FOXO3A/FOXO3 Antibody	
Gene Name	FOXO3	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, rat	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human FOXO3A recombinant protein (Position: Q471-G673). Human FOXO3A shares 97% amino acid (aa) sequence identity with mouse FOXO3A.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	80-100 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

Background Information

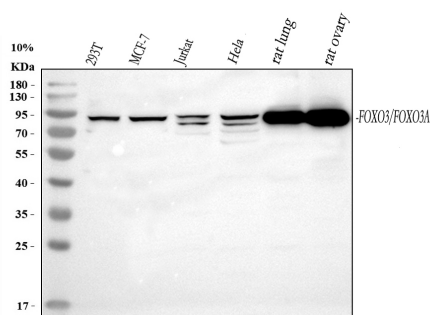
Forkhead box O3, also known as FKHL1 or FOXO3a, is a human protein encoded by the FOXO3 gene. FOXO3 belongs to the O subclass of the forkhead family of transcription factors which are characterized by a distinct fork head DNA-binding domain. It is mapped to 6q21. This protein likely functions as a trigger for apoptosis through upregulation of genes necessary for cell death, such as Bim and PUMA, or downregulation of anti-apoptotic proteins such as FLIP. In mammals FOXO3 regulates the resistance of cells to stress by inducing DNA repair and thereby may also affect organismal life span. In addition, it is thought that FOXO3 is also involved in protection from oxidative stress by

upregulating antioxidants such as catalase and MnSOD.

Reference

Anti-FOXO3A/FOXO3 Antibody被引用在4文献中。

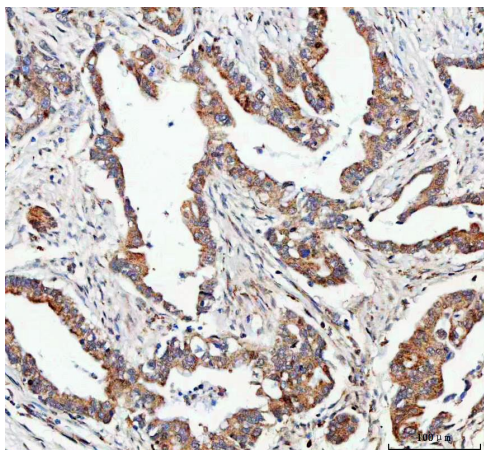
Selected Validation Data



Western blot analysis of FOXO3A/FOXO3 using anti-FOXO3A/FOXO3 antibody (PB9196). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

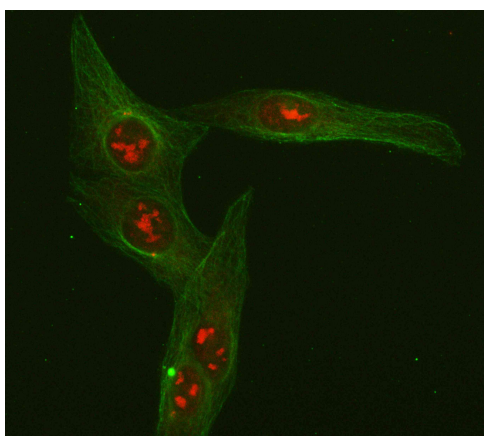
Lane 1: human 293T whole cell lysates,
Lane 2: human MCF-7 whole cell lysates,
Lane 3: human Jurkat whole cell lysates,
Lane 4: human Hela whole cell lysates,
Lane 5: rat lung tissue lysates,
Lane 6: rat ovary tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-FOXO3A/FOXO3 antigen affinity purified polyclonal antibody (PB9196) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for FOXO3A/FOXO3 at approximately 80-90 kDa. The expected band size for FOXO3A/FOXO3 is at 71 kDa.

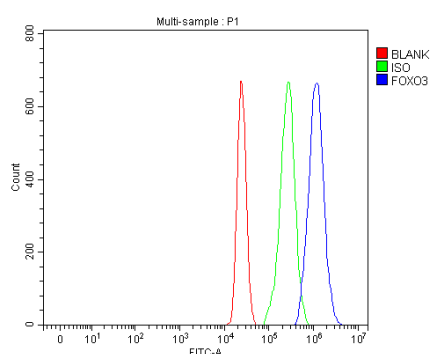


IHC analysis of FOXO3A/FOXO3 using anti-FOXO3A/FOXO3 antibody (PB9196) .

FOXO3A/FOXO3 was detected in a paraffin-embedded section of human pancreatic ductal adenocarcinoma tissue. The tissue section was incubated with rabbit anti-FOXO3A/FOXO3 Antibody (PB9196) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of FOXO3A/FOXO3 using anti-FOXO3A/FOXO3 antibody (PB9196) and anti-Beta Tubulin antibody (M01857-3). FOXO3A/FOXO3 was detected in an immunocytochemical section of U2OS cells. The section was incubated with rabbit anti-FOXO3A/FOXO3 Antibody (PB9196) at a dilution of 1:100. Cy3-Conjugated Anti-rabbit IgG Secondary Antibody (Red) (Catalog # BA1032) and Fluoro488-conjugated Anti-mouse IgG Secondary Antibody (Green) (Catalog # BA1126) were used as secondary antibody.



Flow Cytometry analysis of MCF-7 cells using anti-FOXO3A/FOXO3 antibody (PB9196).

Overlay histogram showing MCF-7 cells stained with PB9196 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-FOXO3A/FOXO3 Antibody (PB9196, 1:100). Fluoro488 conjugated goat anti-rabbit IgG (BA1127, 1:100) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG (Catalog # BA1045) (1:100) used under the same conditions. Unlabelled sample (Red line) was also used as a control.