

## Summary

<b>Production Name</b>	FoxO3A Rabbit Polyclonal Antibody
<b>Description</b>	Rabbit Polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	IHC, WB,
<b>Reactivity</b>	Human, Mouse, Rat

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

## Immunogen

<b>Gene Name</b>	FOXO3
<b>Alternative Names</b>	FOXO3; FKHL1; FOXO3A; Forkhead box protein O3; AF6q21 protein; Forkhead in rhabdomyosarcoma-like 1
<b>Gene ID</b>	2309.0
<b>SwissProt ID</b>	O43524. The antiserum was produced against synthesized peptide derived from human FKHL1. AA range:220-269

## Application

<b>Dilution Ratio</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000. Not yet tested in other applications.
<b>Molecular Weight</b>	90kD

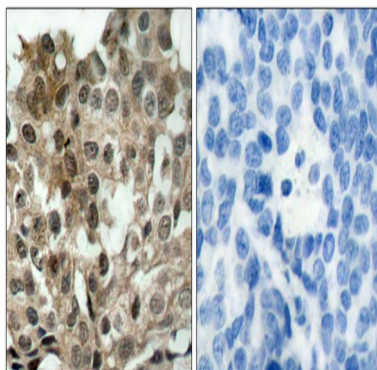
## Background

This gene belongs to the forkhead family of transcription factors which are characterized by a distinct forkhead domain. This gene likely functions as a trigger for apoptosis through expression of genes necessary for cell death. Translocation of this gene with the MLL gene is associated with secondary acute leukemia. Alternatively spliced transcript variants encoding the same protein have been observed. [provided by RefSeq, Jul 2008],disease:A chromosomal aberration involving FOXO3 is found in secondary acute leukemias. Translocation t(6;11)(q21;q23) with MLL/HRX.,function:Transcriptional activator which triggers apoptosis in the absence of survival factors, including neuronal cell death upon oxidative stress. Recognizes and binds to the DNA sequence 5'-[AG]TAAA[TC]A-3'.PTM:In the presence of survival factors such as IGF-1, phosphorylated on Thr-32 and Ser-253 by AKT1/PKB. This phosphorylated form then interacts with 14-3-3 proteins and is retained in the cytoplasm. Survival factor withdrawal induces dephosphorylation and promotes translocation to the nucleus where the dephosphorylated protein induces transcription of target genes and triggers apoptosis. Although AKT1/PKB doesn't appear to phosphorylate Ser-315 directly, it may activate other kinases that trigger phosphorylation at this residue. Phosphorylated by STK4 on Ser-209 upon oxidative stress, which leads to dissociation from YWHAB/14-3-3-beta and nuclear translocation.,similarity:Contains 1 fork-head DNA-binding domain.,subcellular location:Translocates to the nucleus upon oxidative stress and in the absence of survival factors.,subunit:Interacts with YWHAB/14-3-3-beta and YWHAZ/14-3-3-zeta, which are required for cytosolic sequestration. Upon oxidative stress, interacts with STK4, which disrupts interaction with YWHAB/14-3-3-beta and leads to nuclear translocation.,tissue specificity:Ubiquitous.,

## Research Area

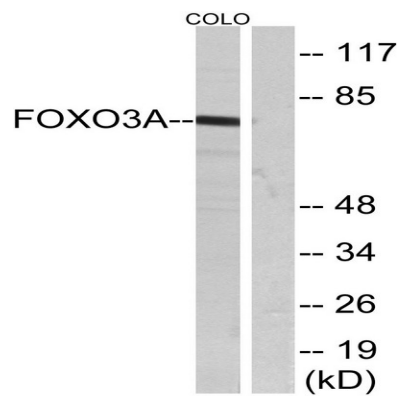
Insulin Receptor; B Cell Receptor; PI3K/Akt; Protein\_Acetylation

## Image Data

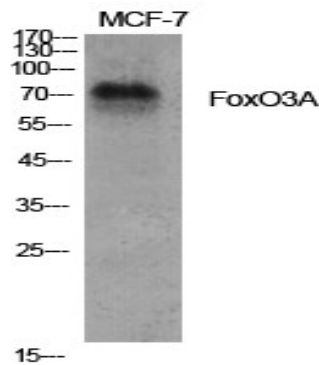


Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using FKHL1 Antibody. The picture on the right is blocked with the synthesized peptide.

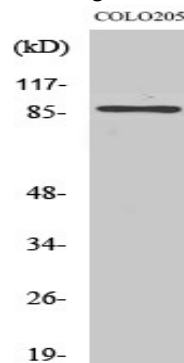
**Product Name: FoxO3A Rabbit Polyclonal Antibody**  
**Catalog #: APRab11106**



Western blot analysis of lysates from COLO205 cells, treated with serum, using FKHL1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using FoxO3A Polyclonal Antibody diluted at 1: 1000



Western Blot analysis of Jurkat cells using FoxO3A Polyclonal Antibody diluted at 1: 1000

## Note

For research use only.