

**Product Name: Phospho-FoxO3a (S253) (16M7) Rabbit  
Monoclonal Antibody  
Catalog #: AMRe05908**

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## Summary

<b>Production Name</b>	Phospho-FoxO3a (S253) (16M7) Rabbit Monoclonal Antibody
<b>Description</b>	Rabbit Monoclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB
<b>Reactivity</b>	Human,Mouse,Rat

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Phospho Antibody
<b>Isotype</b>	IgG
<b>Clonality</b>	Monoclonal
<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>	Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% New type preservative N and 0.05% BSA.
<b>Purification</b>	Affinity purification

## Immunogen

<b>Gene Name</b>	FOXO3
<b>Alternative Names</b>	AF6q21 protein; FKHR2; FKHRL1; Forkhead box O3; forkhead box O3A; Forkhead box protein O3A; Forkhead in rhabdomyosarcoma-like 1; FOXO3A;
<b>Gene ID</b>	2309.0
<b>SwissProt ID</b>	O43524.A synthetic phosphopeptide corresponding to residues surrounding Ser253 of human FOXO3A

## Application

<b>Dilution Ratio</b>	WB: 1:1000
<b>Molecular Weight</b>	71kDa

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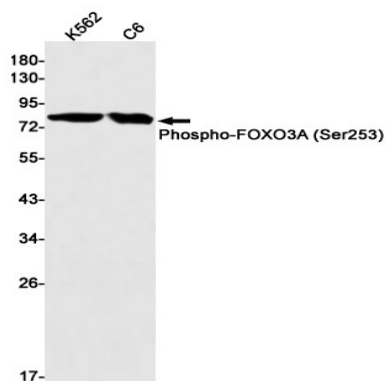
## Background

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. Transcriptional activator that recognizes and binds to the DNA sequence 5'-[AG]TAAA[TC]A-3' and regulates different processes, such as apoptosis and autophagy (PubMed: [10102273](http://www.uniprot.org/citations/10102273)), (PubMed: [16751106](http://www.uniprot.org/citations/16751106)), (PubMed: [21329882](http://www.uniprot.org/citations/21329882)), (PubMed: [30513302](http://www.uniprot.org/citations/30513302)). Acts as a positive regulator of autophagy in skeletal muscle: in starved cells, enters the nucleus following dephosphorylation and binds the promoters of autophagy genes, such as GABARAP1L, MAP1LC3B and ATG12, thereby activating their expression, resulting in proteolysis of skeletal muscle proteins (By similarity). Triggers apoptosis in the absence of survival factors, including neuronal cell death upon oxidative stress (PubMed: [10102273](http://www.uniprot.org/citations/10102273)), (PubMed: [16751106](http://www.uniprot.org/citations/16751106)). Participates in post-transcriptional regulation of MYC: following phosphorylation by MAPKAPK5, promotes induction of miR-34b and miR-34c expression, 2 post-transcriptional regulators of MYC that bind to the 3'UTR of MYC transcript and prevent its translation (PubMed: [21329882](http://www.uniprot.org/citations/21329882)). In response to metabolic stress, translocates into the mitochondria where it promotes mtDNA transcription (PubMed: [23283301](http://www.uniprot.org/citations/23283301)). In response to metabolic stress, translocates into the mitochondria where it promotes mtDNA transcription. Also acts as a key regulator of chondrogenic commitment of skeletal progenitor cells in response to lipid availability: when lipids levels are low, translocates to the nucleus and promotes expression of SOX9, which induces chondrogenic commitment and suppresses fatty acid oxidation (By similarity). Also acts as a key regulator of regulatory T-cells (Treg) differentiation by activating expression of FOXP3 (PubMed: [30513302](http://www.uniprot.org/citations/30513302)).

## Research Area

## Image Data

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Western blot detection of Phospho-FOXO3A (Ser253) in K562,C6 cell lysates using Phospho-FOXO3A (Ser253) antibody(1:1000 diluted).

**Note**

For research use only.