

## FoxO3a (pS294) Polyclonal Antibody

Store at -20°C

Catalog Number: A16693

Pub. No. MAN0009173 Rev. 1.00

Clonality: Polyclonal

Amount: 100 µL

Host/Class: Rabbit

Reactivity: Human FoxO3A

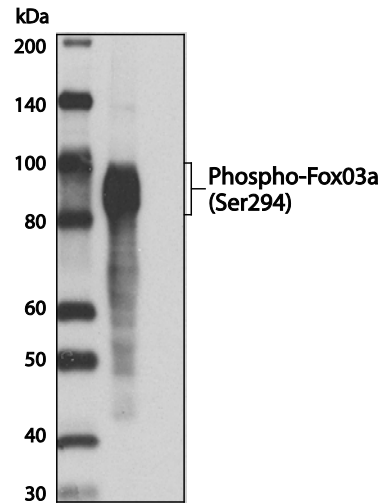
Species Reactivity: Human, Mouse, Rat, Monkey

### Product Description

The Forkhead family of transcription factors includes three members (FoxO1, FoxO4, and FoxO3a) with sequence similarity to the nematode orthologue DAF-16, which mediates signaling via a pathway involving IGFR1, PI3K, and Akt (1-3). Active forkhead members act as tumor suppressors by promoting cell cycle arrest and apoptosis. Increased expression of any FoxO member results in the activation of the cell cycle inhibitor p27 Kip1. Forkhead transcription factors also play a part in TGF-β-mediated upregulation of p21 Cip1, a process negatively regulated through PI3K (4). Increased proliferation results when forkhead transcription factors are inactivated through phosphorylation by Akt at Thr24, Ser256, and Ser319, which results in nuclear export and inhibition of transcription factor activity (5). Forkhead transcription factors can also be inhibited by the deacetylase sirtuin (SirT1) (6).

### Product Specifications

<b>Immunogen:</b>	A synthetic peptide surrounding Ser294 of human FoxO3a
<b>Apparent MW:</b>	82–97 kDa
<b>Gene ID:</b>	2309
<b>Protein Accession No.:</b>	O43524
<b>Lot:</b>	See product label



**Figure 1** Western blot analysis of extracts from 293T cells, transfected with tagged FoxO3a, using FoxO3a (pS294) Polyclonal Antibody.

### Product Applications

Applications reported for this antibody include western blot, and immunoprecipitation.

Because conditions may vary, it is recommended that each investigator determine the optimal amount of antibody to be used for each application.

Application	Recommended Dilution
Western blotting	1:1000
Immunoprecipitation	1:50

### Storage and Handling

Store reagents at -20°C. Avoid repeated freezing and thawing. Do not aliquot the antibody.

### Stability

When stored as instructed, expires one year from date of receipt unless otherwise indicated on product label.

### Storage Buffer

10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/mL BSA, 50% glycerol.

For research use only. Not for use in diagnostic procedures

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## References

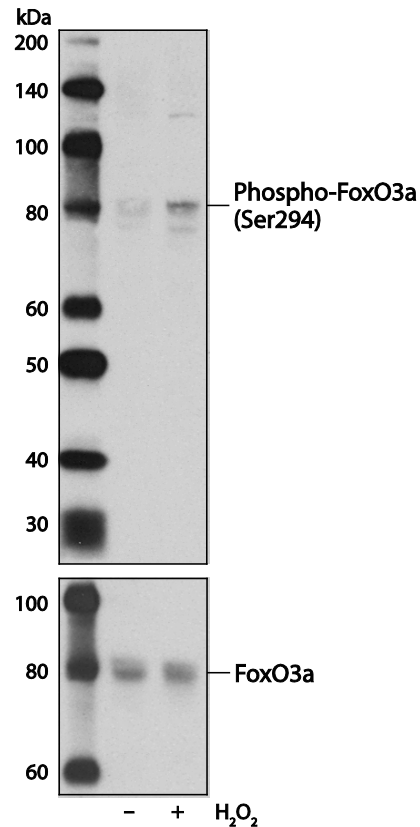
1. Nakae, J. et al. (1999) J. Biol. Chem. 274, 15982-15985.
2. Rena, G. et al. (1999) J. Biol. Chem. 274, 17179-17183.
3. Guo, S. et al. (1999) J. Biol. Chem. 274, 17184-17192.
4. Seoane, J. et al. (2004) Cell 117, 211-223.
5. Arden, K.C. (2004) Mol. Cell 14, 416-418.
6. Yang, Y. et al. (2005) EMBO J. 24, 1021-1032.

## Product Documentation

To obtain a Certificate of Analysis or Safety Data Sheets (SDSs), visit [www.lifetechnologies.com/support](http://www.lifetechnologies.com/support).








## Limited Product Warranty

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**Figure 2** Western blot analysis of extracts from C2C12 cells, untreated or H<sub>2</sub>O<sub>2</sub> treated, using FoxO3a (pS294) Polyclonal Antibody (top) or a FoxO3a antibody (bottom).

## Explanation of symbols

Symbol	Description	Symbol	Description	Symbol	Description
	Manufacturer		Catalog number		Batch code
	Use by		Temperature limitation		
	Consult instructions for use		Caution, consult accompanying documents		

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