

Phospho-FoxO1 (Thr24)/FoxO3a (Thr32) Blocking Peptide

✓ 100 µg
(10 western blots)

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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Background: The Forkhead family of transcription factors is involved in tumorigenesis in rhabdomyosarcoma and acute leukemias (1–3). Within the family, three members (FoxO1, FoxO4 and FoxO3a) have sequence similarity to the nematode orthologue DAF-16, which mediates signaling via a pathway involving IGF1R, PI3K and Akt (4–6). There are three Akt phosphorylation sites in the FKHR proteins: Thr24, Ser256 and Ser319. Phosphorylation of FKHR family members at these sites by Akt promotes cell survival and regulates the cell cycle. Phosphorylation of FKHR proteins regulates their nuclear translocation and target gene transcription (7,8).

Description: This peptide can be used to specifically block Phospho-FoxO1 (Thr24)/FoxO3a (Thr32) Antibody #9464 reactivity.

Quality Control: The quality of the peptide was evaluated by reversed-phase HPLC and by mass spectrometry. The peptide has been tested to block Phospho-FoxO1 (Thr24)/FoxO3a (Thr32) Antibody #9464 signal completely in western blotting.

Applications: Use as a blocking reagent to evaluate the specificity of antibody reactivity in western immunoblotting.

Directions for Use: For western immunoblotting, add 10 µl of antibody and 10 µl of blocking peptide to 10 ml of antibody dilution buffer, and incubate at room temperature for 1 hour before allowing to react with the blot.

Background References:

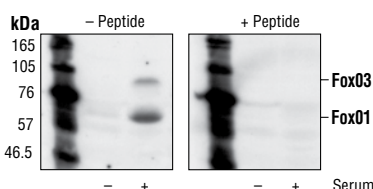
- (1) Anderson, M.J. et al. (1998) *Genomics* 47, 187–199.
- (2) Galili, N. et al. (1993) *Nat. Genet.* 5, 230–235.
- (3) Borkhardt, A. et al. (1997) *Oncogene* 14, 195–202.
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- (5) Rena, G. et al. (1999) *J. Biol. Chem.* 274, 17179–17183.
- (6) Guo, S. et al. (1999) *J. Biol. Chem.* 274, 17184–17192.
- (7) Brunet, A. et al. (1999) *Cell* 96, 857–868.
- (8) Medema, R.H. (2000) *Nature* 404, 782–787.

Entrez-Gene ID # 2308
Swiss-Prot Acc. # Q12778

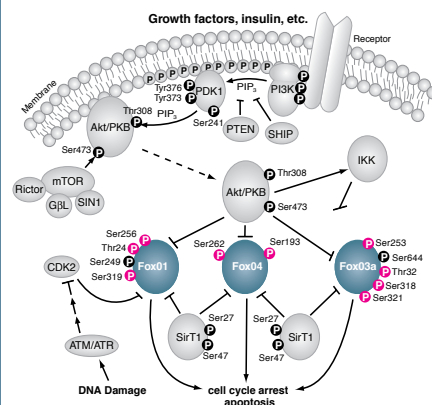
Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

For application specific protocols please see the web page for this product at www.cellsignal.com.

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Western blot analysis of extracts from HeLa cells serum-starved for 48 hours or serum-treated for 30 minutes, using Phospho-FoxO1 (Thr24)/FoxO3a (Thr32) Antibody #9464 (left) or the same antibody preincubated with Phospho-FoxO1 (Thr24)/FoxO3a (Thr32) Blocking Peptide.



IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.