

ARG51637 anti-FOXO4 phospho (Ser197) antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes FOXO4 phospho (Ser197)
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	FOXO4
Species	Human
Immunogen	Peptide sequence around phosphorylation site of serine 197 (A-A-S(p)-M-D) derived from Human AFX.
Conjugation	Un-conjugated
Alternate Names	AFX1; MLLT7; AFX; Forkhead box protein O4; Fork head domain transcription factor AFX1

Application Instructions

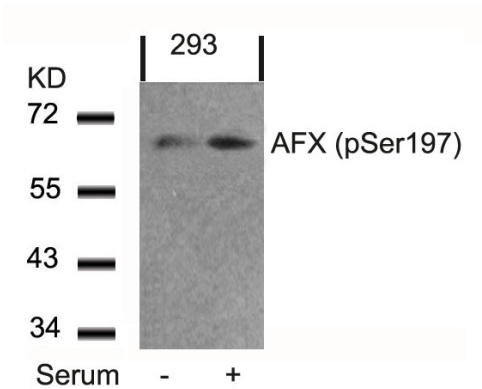
Application table	Application	Dilution
	ICC/IF	1:100 - 1:200
	IHC-P	1:50 - 1:100
	WB	1:500 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Antibodies were produced by immunizing rabbits with KLH-conjugated synthetic phosphopeptide. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. In addition, non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Buffer	PBS (without Mg ²⁺ and Ca ²⁺ , pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

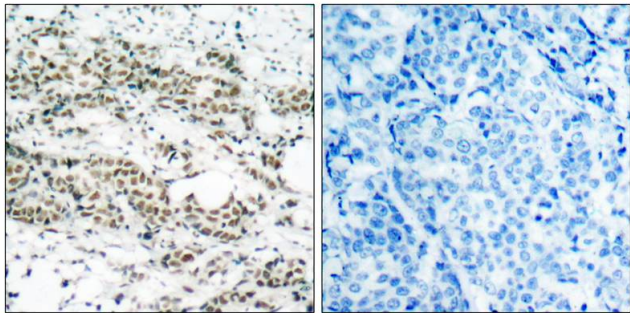
Note	For laboratory research only, not for drug, diagnostic or other use.
<div>Bioinformation</div>	
Database links	GeneID: 4303 Human GeneID: 54601 Mouse Swiss-port # P98177 Human Swiss-port # Q9WVH3 Mouse
Gene Symbol	FOXO4
Gene Full Name	forkhead box O4
Background	Transcription factor involved in the regulation of the insulin signaling pathway. Binds to insulin-response elements (IREs) and can activate transcription of IGFBP1. Down-regulates expression of HIF1A and suppresses hypoxia-induced transcriptional activation of HIF1A-modulated genes. Also involved in negative regulation of the cell cycle.
Function	Transcription factor involved in the regulation of the insulin signaling pathway. Binds to insulin-response elements (IREs) and can activate transcription of IGFBP1. Down-regulates expression of HIF1A and suppresses hypoxia-induced transcriptional activation of HIF1A-modulated genes. Also involved in negative regulation of the cell cycle. Involved in increased proteasome activity in embryonic stem cells (ESCs) by activating expression of PSMD11 in ESCs, leading to enhanced assembly of the 26S proteasome, followed by higher proteasome activity. [UniProt]
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Cell Death antibody; Gene Regulation antibody; Metabolism antibody
Calculated Mw	54 kDa
PTM	Acetylation by CREBBP/CBP, which is induced by peroxidase stress, inhibits transcriptional activity. Deacetylation by SIRT1 is NAD-dependent and stimulates transcriptional activity. Phosphorylation by PKB/AKT1 inhibits transcriptional activity and is responsible for cytoplasmic localization. May be phosphorylated at multiple sites by NLK. Monoubiquitinated; monoubiquitination is induced by oxidative stress and reduced by deacetylase inhibitors; results in its relocalization to the nucleus and its increased transcriptional activity. Deubiquitinated by USP7; deubiquitination is induced by oxidative stress; enhances its interaction with USP7 and consequently, deubiquitination; increases its translocation to the cytoplasm and inhibits its transcriptional activity. Hydrogene-peroxide-induced ubiquitination and USP7-mediated deubiquitination have no major effect on its protein stability.

Images



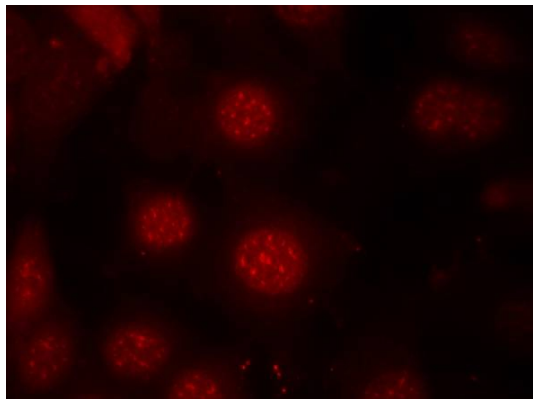
ARG51637 anti-FOXO4 phospho (Ser197) antibody WB image

Western blot: Extracts from 293 cells untreated or treated with serum stained with ARG51637 anti-FOXO4 phospho (Ser197) antibody.



ARG51637 anti-FOXO4 phospho (Ser197) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast carcinoma tissue stained with ARG51637 anti-FOXO4 phospho (Ser197) antibody (left) or the same antibody preincubated with blocking peptide (right).



ARG51637 anti-FOXO4 phospho (Ser197) antibody ICC/IF image

Immunofluorescence: methanol-fixed MCF7 cells stained with ARG51637 anti-FOXO4 phospho (Ser197) antibody.