

# AB-PN594

## FOXO1-pS319 Antibody

Phosphosite-specific rabbit polyclonal antibody for FOXO1A (FKHR; FKHL1). This phosphoserine-site antibody also cross-reacts with phosphothreonine, phosphotyrosine, serine, threonine and glutamic acid substitutions.

Website: [www.kinexus.ca](http://www.kinexus.ca)  
Email: [info@kinexus.ca](mailto:info@kinexus.ca)  
Phone: 604-323-2547



Address: 8755 Ash Street, Suite 1  
Vancouver, British Columbia,  
Canada V6P 6T3

### Target Protein

<b>Protein Name Long:</b>	Forkhead box protein O1
<b>Protein Alias:</b>	FKH1; FKHR; Forkhead box O1; Forkhead box O1A (FKHR); Forkhead box protein O1A; Forkhead in rhabdomyosarcoma; FOXO1
<b>UniProt ID:</b>	Q12778
<b>Protein Molecular Mass:</b>	69,662 Da (655 AA)

### Immunogen

<b>Antibody Immunogen Source:</b>	Synthetic phosphopeptide patterned after human FOXO1
<b>Antibody Immunogen Sequence:</b>	PRTS(pS)NAS( $\beta$ )C
<b>Antibody Immunogen Description:</b>	Corresponds to amino acid residues P315 to S322. S319 phosphorylation increases rate of nuclear exclusion. It also creates the pSer-Xaa-Xaa-Ser recognition motif for CK1, allowing it to phosphorylate S322, induces interaction with IQGAP1, and regulates apoptosis and inhibits transcription. This is one of the major <i>in vivo</i> phosphorylation sites in FOXO1A ( $\geq 30$ reports from high throughput mass spectrometry studies recorded in PhosphoSitePlus). FOXO1A is known to be phosphorylated at this site <i>in vitro</i> by Akt1 (PKBa), Akt3 (PKBg), and SGK1.
<b>Antibody Target Type:</b>	Phosphosite-specific

### Production

<b>Antibody Host Species:</b>	Rabbit
<b>Antibody Type:</b>	Polyclonal
<b>Antibody Isotype:</b>	IgG
<b>Production Method:</b>	The immunizing peptide was produced by solid phase synthesis on a multipеп peptide synthesizer and purified by reverse-phase hplc chromatography. Purity was assessed by analytical hplc and the amino acid sequence confirmed by mass spectrometry analysis. This peptide was coupled to KLH prior to immunization into rabbits. New Zealand White rabbits were subcutaneously injected with KLH-coupled immunizing peptide every 4 weeks for 4 months. The sera from these animals was applied onto an agarose column to which the immunogen peptide was thio-linked. Antibody was eluted from the column with 0.1 M glycine, pH 2.5. Subsequently, the antibody solution was neutralized to pH 7.0 with saturated Tris.
<b>Amount:</b>	25 $\mu$ g
<b>Antibody Concentration:</b>	1 mg/ml
<b>Storage Buffer:</b>	Phosphate buffered saline pH 7.4, 0.05% Thimerasol
<b>Storage Conditions:</b>	For long term storage, keep frozen at $-40^{\circ}\text{C}$ or lower. Stock solution can be kept at $+4^{\circ}\text{C}$ for more than 3 months. Avoid repeated freeze-thaw cycles.
<b>Storage Stability:</b>	$>2$ years

## Applications

<b>Product Use:</b>	Western blotting   Antibody microarray
<b>Antibody Dilution Recommended:</b>	2 µg/ml for immunoblotting
<b>Antibody Species Reactivity:</b>	Human   Chimpanzee   Rhesus macaque   Dog   Rat   Mouse   Platypus   Zebra fish

This product is for *in vitro* research use only and is not intended for use in humans or animals.

For more information on our products please visit <https://kinexus-ca.myshopify.com/> or contact us at 1-866-546-3987