

# AB-PN597

## FOXO3-pS294 Antibody

Phosphosite-specific rabbit polyclonal antibody for FOXO3 (FKHRL1). This phosphoserine-site antibody also cross-reacts with a phosphothreonine substitution in the phosphosite.

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 O3
<b>Protein Alias:</b>	AF6q21; AF6q21 protein; Fkhr2; Fkhr1; Forkhead box O3; Forkhead box O3A; Forkhead in rhabdomyosarcoma-like 1; FOXO2; Foxo3; Foxo3a
<b>UniProt ID:</b>	O43524
<b>Protein Molecular Mass:</b>	71,277 Da (673 AA)

### Immunogen

<b>Antibody Immunogen Source:</b>	Synthetic phosphopeptide patterned after human FOXO3
<b>Antibody Immunogen Sequence:</b>	KWPG(pS)PTS(βA)C
<b>Antibody Immunogen Description:</b>	Corresponds to amino acid residues K290 to S297. S294 phosphorylation inhibits FOXO3 dependent transcription, causes degradation of FOXO3, and regulates cell growth, and molecular association, including inducing interaction with MDM2. This is one of the major <i>in vivo</i> phosphorylation sites in FOXO3 (≥77 reports from high throughput mass spectrometry studies recorded in PhosphoSitePlus). FOXO3 is known to be phosphorylated at this site <i>in vitro</i> by ERK1 (MAPK3), ERK2 (MAPK1), and p38a MAPK (MAPK14).
<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 multipепptide 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 µg
<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°C or lower. Stock solution can be kept at +4°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   Rhesus Macaque   Dog   Rat   Mouse   Frog

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