

AB-PK958

Akt1-pS473 Antibody

Phosphosite-specific rabbit polyclonal antibody for Akt1 (PKB α). This phosphoserine-site antibody is also weakly cross-reactive for phosphothreonine in the phosphosite.

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Target Protein

Protein Name Long:	RAC-alpha serine/threonine-protein kinase
Protein Alias:	Akt; Akt1; Akt1 kinase; C-Akt; Kinase Akt1; PKB; PKB-alpha; PRKBA; V-akt murine thymoma viral oncogene 1; Protein kinase B; RAC; RAC-alpha serine,threonine kinase; RAC-alpha serine/threonine kinase; RAC-PK-alpha; PKBA; hCG_96740; Akt1_NEW; Akt; MGC99656; CCDS9994; B0LPE5; B2RAM5; B3KVH4; B3KXD7; B7Z5R1; Q9BV07; ENSG00000142208
UniProt ID:	P31749
Protein Molecular Mass:	55,686 Da (480 AA; P31749); 48,347 Da (418 AA; P31749-2)

Immunogen

Antibody Immunogen Source:	Synthetic phosphopeptide patterned after human Akt1
Antibody Immunogen Sequence:	FPQF(pS)YSAS(β)C
Antibody Immunogen Description:	Corresponds to amino acid residues F469 to S477. S473 phosphorylation stimulates phosphotransferase activity of Akt1, and regulates cell cycle progression, and its intracellular location. This is the major site of phosphorylation of Akt1 identified by mass spectrometry studies (≥ 73 reports by high throughput and 1,960 reports by low throughput in PhosphoSitePlus) and over 1391 scientific publications involving primarily Western blotting. Akt1 is known to be phosphorylated <i>in vitro</i> at S473 by ATM, ATR, DNAPK, FRAP1, IKKE, ILK, LRRK2, MAPKAPK2, MAPKAPK5, mTOR, p38a MAPK, PDK1, PDPK1, PKCa, PKCb1, PKCe, PKD1, and TBK1.
Antibody Target Type:	Phosphosite-specific

Production

Antibody Host Species:	Rabbit
Antibody Type:	Polyclonal
Antibody Isotype:	IgG
Production Method:	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.
Amount:	25 μ g
Antibody Concentration:	0.8 mg/ml
Storage Buffer:	Phosphate buffered saline pH 7.4, 0.05% Thimerasol

Storage Conditions:	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.
Storage Stability:	>2 years

Applications

Product Use:	Western blotting Antibody microarray
Antibody Dilution Recommended:	2 µg/ml for immunoblotting
Antibody Species Reactivity:	Human Chimpanzee 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