

DATASHEET

AKT2 (Phospho-S474) Rabbit Polyclonal Antibody

CAT. NO. APA11981

KEY FEATURES

Target	AKT2 (Phospho-S474)	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat, Chicken, Dog	Clonality	Polyclonal
Applications	WB, IHC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

BACKGROUND

Serine/threonine kinase closely related to AKT1 and AKT3. All 3 enzymes, AKT1, AKT2 and AKT3, are collectively known as AKT kinase. AKT regulates many processes including metabolism, proliferation, cell survival, growth and angiogenesis, through the phosphorylation of a range of downstream substrates. Over 100 substrates have been reported so far, although for most of them, the precise AKT kinase catalyzing the reaction was not specified. AKT regulates glucose uptake by mediating insulin-induced translocation of the SLC2A4/GLUT4 glucose transporter to the cell surface. Phosphorylation of PTPN1 at 'Ser-50' negatively modulates its phosphatase activity preventing dephosphorylation of the insulin receptor and the attenuation of insulin signaling.

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to AKT2 (Phospho-S474)
Specificity	Recognizes endogenous levels of AKT2 protein only when phosphorylated at S474.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding S474 of human AKT2 protein. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 55 kD; Observed: 60 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	RAC-beta serine/threonine-protein kinase; Protein kinase Akt-2; Protein kinase B beta; PKB beta; RAC-PK-beta
Gene Symbol	AKT2
Entrez Gene	208(Human); 11652(Mouse); 25233(Rat)
SwissProt	P31751(Human); Q60823(Mouse); P47197(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

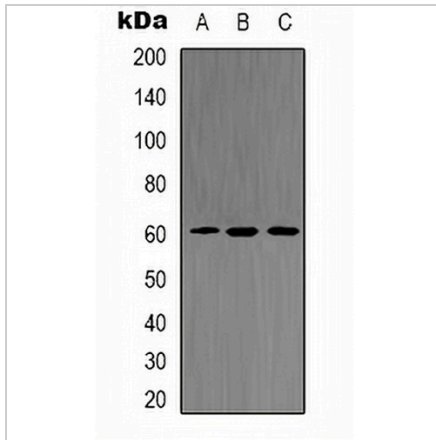
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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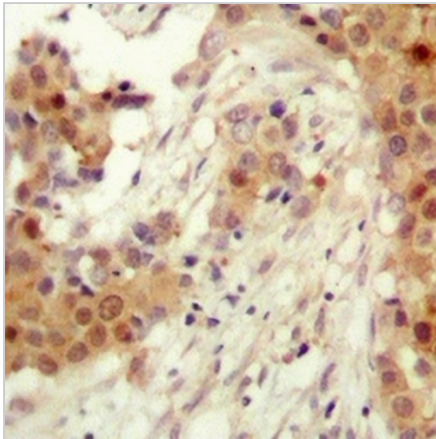
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Western blot analysis of AKT2 (Phospho-S474) expression in Hela (A), mouse brain (B), PC12 UV-treated (C) whole cell lysates. (Predicted band size: 55 kD; Observed band size: 60 kD)



Immunohistochemical analysis of AKT2 (Phospho-S474) staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.