

AP22624SU-N**Polyclonal Antibody to AKT1/AKT2/AKT3 (C-term) - Serum**

Alternate names:	AKT-2, Akt-1, C-AKT, PKB gamma, PKBG, Protein kinase B, RAC-PK-alpha, RAC-PK-beta, RAC-PK-gamma
Quantity:	50 µl
Concentration:	75 mg/ml
Background:	AKT is a component of the PI-3 kinase pathway and is activated by phosphorylation at Ser 473 and Thr 308. AKT is a cytoplasmic protein also known as Protein Kinase B (PKB) and rac (related to A and C kinases). AKT is a key regulator of many signal transduction pathways. AKT Exhibits tight control over cell proliferation and cell viability. Overexpression or inappropriate activation of AKT is noted in many types of cancer. AKT mediates many of the downstream events of PI 3-kinase (a lipid kinase activated by growth factors, cytokines and insulin). PI 3-kinase recruits AKT to the membrane, where it is activated by PDK1 phosphorylation. Once phosphorylated, AKT dissociates from the membrane and phosphorylates targets in the cytoplasm and the cell nucleus. AKT has two main roles: (i) inhibition of apoptosis and (ii) promotion of proliferation.
Uniprot ID:	P31749
NCBI:	NP_001014431
GeneID:	207
Host:	Rabbit
Immunogen:	Synthetic peptide -KLH conjugated corresponding to the C-terminus (460-480) of Human, Rat, Mouse and Chicken AKT proteins conjugated to KLH using maleimide. AA Sequence: C-R-P-H-F-P-Q-F-S-Y-S-A-S-G-T-A Remarks: A residue of cysteine was added to the amino terminal end to facilitate coupling.
Format:	State: Liquid Ig fraction Purification: Delipidation and Defibrination Buffer System: 0.02 M potassium phosphate, 0.15 M Sodium Chloride, pH 7.2, 0.09% Sodium Azide
Applications:	ELISA: 1/2000 - 1/10000. Immunofluorescence: 1/100 - 1/1000. Immunohistochemistry on Paraffin Sections: 1/100. Immunoprecipitation. Western Blot: 1/500 - 1/2000. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	Recognizes AKT (AKT1/AKT2/AKT3). The sequence used to generate this antibody, has a high degree of similarity to regions found in AKT1, AKT2 and AKT3, and thus may cross react with all of these proteins.

Species Reactivity:

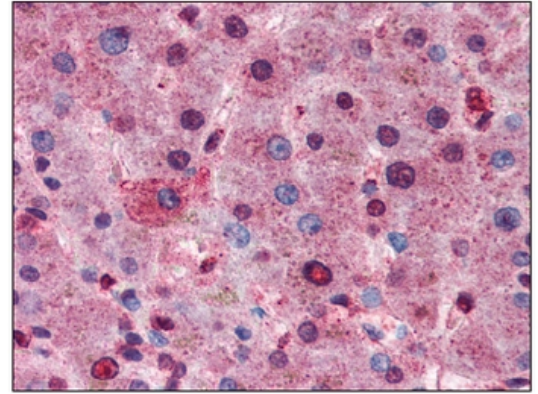
Tested: Human, Mouse and Rat.
Expected from sequence similarity: Chicken.

Storage:

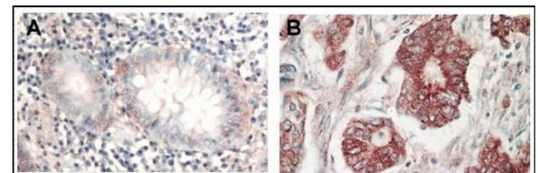
Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.
Dilute only prior to immediate use.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

Pictures:

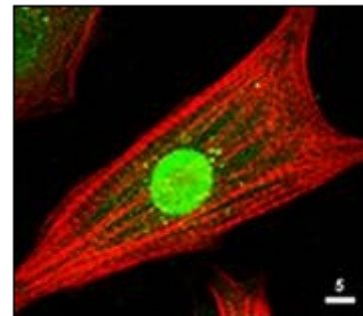
AP22624PU-N AKT antibody staining of Formalin-Fixed Paraffin-Embedded Human Liver at 1/100 followed by Biotin conjugated Goat anti-Rabbit IgG secondary antibody, Alkaline Phosphatase-Streptavidin and Chromogen.



AP22624PU-N AKT antibody staining of Formalin-Fixed Paraffin-Embedded Sections at 1/1,000 dilution: Panel A: Normal colon tissue Panel B: Tumor tissue.



Immunofluorescence Microscopy: Rabbit anti-AKT antibody was used at a 1/80 dilution to stain cultured neonatal Rat cardiomyocytes that express a nuclear-targeted AKT construct. Anti-AKT staining appears green. Actin filaments are labeled red using a Texas-red™ conjugated phalloidin.



AP22624PU-N AKT antibody staining at 1/500 dilution by Immunoblotting.

