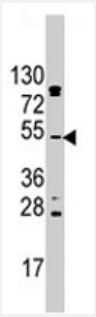
AKT2 polyclonal antibody

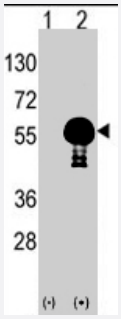
Catalog # PAB4550 Size 400 uL

Applications



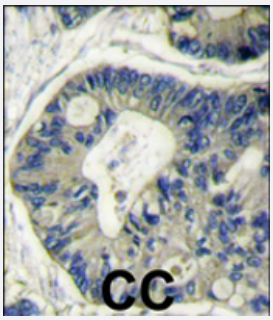
Western Blot (Tissue lysate)

Western blot analysis of AKT2 polyclonal antibody (Cat # PAB4550) in mouse liver tissue lysates (35 ug/lane). AKT2 (arrow) was detected using the purified AKT2 polyclonal antibody (Cat # PAB4550) (1 : 60 dilution).



Western Blot (Transfected lysate)

Western blot analysis of AKT2 polyclonal antibody (Cat # PAB4550) in 293 cell line lysates transiently transfected with the AKT2 gene (2 ug/lane). AKT2 (arrow) was detected using the purified AKT2 polyclonal antibody (Cat # PAB4550) (1 : 60 dilution).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human colon carcinoma reacted with AKT2 polyclonal antibody (Cat # PAB4550) , which was peroxidase-conjugated to the secondary antibody, followed by DAB staining . This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated .

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of AKT2.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to N-terminus of human AKT2.

Host	Rabbit
Reactivity	Human, Mouse
Form	Liquid
Purification	Protein G purification
Recommend Usage	ELISA (1:1000) Western Blot (1:50-100) Immunohistochemistry (1:50-100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

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- Western Blot (Transfected lysate)

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- Enzyme-linked Immunoabsorbent Assay

Gene Info — AKT2

Entrez GeneID	208
Protein Accession#	NP_001617;P31751

Gene Name	AKT2
Gene Alias	PKBB, PKBBETA, PRKBB, RAC-BETA
Gene Description	v-akt murine thymoma viral oncogene homolog 2
Omim ID	125853 164731
Gene Ontology	Hyperlink
Gene Summary	This gene is a putative oncogene encoding a protein belonging to a subfamily of serine/threonine kinases containing SH2-like (Src homology 2-like) domains. The gene was shown to be amplified and overexpressed in 2 of 8 ovarian carcinoma cell lines and 2 of 15 primary ovarian tumors. Ove rexpression contributes to the malignant phenotype of a subset of human ductal pancreatic cancer s. The encoded protein is a general protein kinase capable of phophorylating several known prote ins. [provided by RefSeq
Other Designations	Murine thymoma viral (v-akt) homolog-2|rac protein kinase beta

Publication Reference

- A family with severe insulin resistance and diabetes due to a mutation in AKT2.

  George S, Rochford JJ, Wolfrum C, Gray SL, Schinner S, Wilson JC, Soos MA, Murgatroyd PR, Williams RM, Acerini CL, Dunger DB, Barford D, Umpleby AM, Wareham NJ, Davies HA, Schafer AJ, Stoffel M, O'Rahilly S, Barroso I.

  Science 2004 May; 304(5675):1325.

- Protein kinase B inhibits apoptosis induced by actinomycin D in ECV304 cells through phosphorylation of caspase 8.

  Shim D, Kang HY, Jeon BW, Kang SS, Chang SI, Kim HY.

  Archives of Biochemistry and Biophysics 2004 May; 425(2):214.

- Akt2 expression correlates with prognosis of human hepatocellular carcinoma.

  Xu X, Sakon M, Nagano H, Hiraoka N, Yamamoto H, Hayashi N, Dono K, Nakamori S, Umeshita K, Ito Y, Matsuura N, Monden M.

  Oncology Reports 2004 Jan; 11(1):25.

Pathway

- Acute myeloid leukemia
- Adipocytokine signaling pathway

- Apoptosis
- B cell receptor signaling pathway
- Chemokine signaling pathway
- Chronic myeloid leukemia
- Colorectal cancer
- Endometrial cancer
- ErbB signaling pathway
- Fc epsilon RI signaling pathway
- Fc gamma R-mediated phagocytosis
- Focal adhesion
- Glioma
- Insulin signaling pathway
- Jak-STAT signaling pathway
- MAPK signaling pathway
- Melanoma
- mTOR signaling pathway
- Neurotrophin signaling pathway
- Non-small cell lung cancer
- Pancreatic cancer
- Pathways in cancer
- Prostate cancer
- Renal cell carcinoma
- Small cell lung cancer
- T cell receptor signaling pathway
- Tight junction
- Toll-like receptor signaling pathway

- VEGF signaling pathway

Disease

- Adenocarcinoma
- Carcinoma
- Cardiovascular Diseases
- Diabetes Mellitus
- Drug Toxicity
- Edema
- Esophageal Neoplasms
- Genetic Predisposition to Disease
- HIV Infections
- Hypercholesterolemia
- Insulin Resistance
- Lipodystrophy
- Lung Neoplasms
- Metabolic Syndrome X
- Neoplasms
- Ovarian cancer
- Ovarian Neoplasms
- Polycystic Ovary Syndrome
- Psychiatric Status Rating Scales
- Schizophrenia
- Thyroid Neoplasms