

Product datasheet for **AP50137PU-N**

AKT1 (C-term)/(C-term T450) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	FC, IF, IHC, WB
Recommended Dilution:	ELISA: 1/1000. Western blotting: 1/100 - 1/500. Immunohistochemistry: 1/50 - 1/100. Immunofluorescence: 1/10 - 1/50. Flow cytometry: 1/10-1/50.
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	KLH conjugated synthetic peptide selected from the C-terminal region of human AKT1
Specificity:	This antibody reacts to AKT1.
Formulation:	PBS containing 0.09% (W/V) sodium azide as preservative State: Aff - Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Affinity chromatography on Protein A
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	AKT serine/threonine kinase 1
Database Link:	Entrez Gene 11651 Mouse Entrez Gene 207 Human P31749



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Background: The serine-threonine protein kinase encoded by the AKT1 gene is catalytically inactive in serum-starved primary and immortalized fibroblasts. AKT1 and the related AKT2 are activated by platelet-derived growth factor. The activation is rapid and specific, and it is abrogated by mutations in the pleckstrin homology domain of AKT1. It was shown that the activation occurs through phosphatidylinositol 3-kinase. In the developing nervous system AKT is a critical mediator of growth factor-induced neuronal survival. Survival factors can suppress apoptosis in a transcription-independent manner by activating the serine/threonine kinase AKT1, which then phosphorylates and inactivates components of the apoptotic machinery. Multiple alternatively spliced transcript variants have been found for this gene.

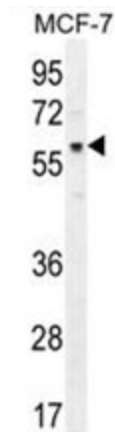
Synonyms: Akt-1, RAC-PK-alpha, Protein kinase B, C-AKT

Note: **Molecular Weight:** 55686 Da

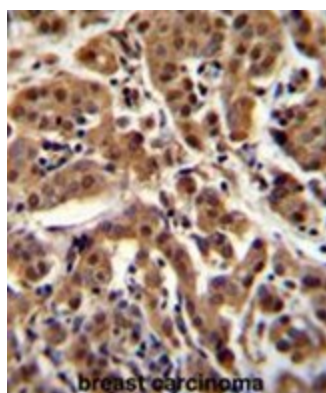
Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase

Protein Pathways: 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, Progesterone-mediated oocyte maturation, Prostate cancer, Renal cell carcinoma, Small cell lung cancer, T cell receptor signaling pathway, Tight junction, Toll-like receptor signaling pathway, VEGF signaling pathway

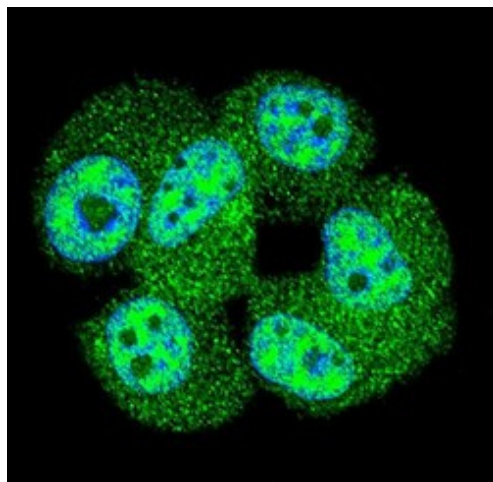
Product images:



AKT1 Antibody (pT450) western blot analysis in MCF-7 cell line lysates (35 ug/lane). This demonstrates the AKT1 antibody detected the AKT1 protein (arrow).



AKT1 Antibody (C-term T450) immunohistochemistry analysis in formalin fixed and paraffin embedded human breast carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of AKT1 Antibody (C-term T450) for immunohistochemistry. Clinical relevance has not been evaluated.



Confocal immunofluorescent analysis of AKT1 Antibody (C-term T450) with MCF-7 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).