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Phospho-AKT1(Thr308)) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3743a

Product Information

Application	DB, IF, E
Primary Accession	P31749
Other Accession	NP_005154.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB27685

Additional Information

Other Names	RAC-alpha serine/threonine-protein kinase, Protein kinase B, PKB, Protein kinase B alpha, PKB alpha, Proto-oncogene c-Akt, RAC-PK-alpha, AKT1, PKB, RAC
Target/Specificity	This AKT1 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding Thr308 of human AKT1.
Dilution	DB~~1:500 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Phospho-AKT1(Thr308)) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Background

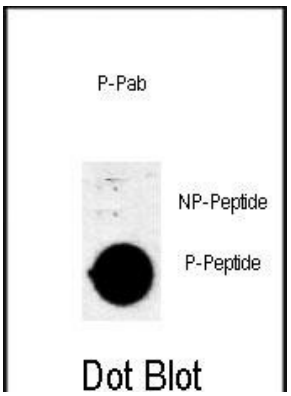
The serine-threonine protein kinase encoded by the AKT1 gene is catalytically inactive in serum-starved primary and immortalized fibroblasts. AKT1 and the related AKT2 are activated by platelet-derived growth factor. The activation is rapid and specific, and it is abrogated by mutations in the pleckstrin 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. [provided by RefSeq].

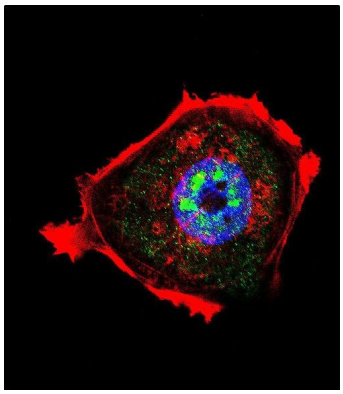
References

Zhao, W.D., et al. Infect. Immun. 78(11):4809-4816(2010) Sanematsu, F., et al. Circ. Res. 107(9):1102-1105(2010) Nicodemus, K.K., et al. Arch. Gen. Psychiatry 67(10):991-1001(2010) Treekitkarnmongkol, W., et al. World J. Gastroenterol. 16(32):4047-4054(2010) Chen, J., et al. PLoS ONE 5 (8), E12293 (2010) :

Images



Dot blot analysis of anti-Phospho-AKT1 (Thr308) Antibody Phospho-specific Pab (Cat. #AP3743a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.6ug per ml.



Confocal immunofluorescent analysis of Phospho-AKT1 (Thr308) Antibody(Cat#AP3743a) with MCF-7 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green).Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).DAPI was used to stain the cell nuclear (blue).

Citations

- LINC01296/miR-26a/GALNT3 axis contributes to colorectal cancer progression by regulating O-glycosylated MUC1 via PI3K/AKT pathway.
- Functional screen analysis reveals miR-3142 as central regulator in chemoresistance and proliferation through activation of the PTEN-AKT pathway in CML.
- MiR-106b and miR-93 regulate cell progression by suppression of PTEN via PI3K/Akt pathway in breast cancer.
- MicroRNA-130b targets PTEN to mediate drug resistance and proliferation of breast cancer cells via the PI3K/Akt signaling pathway.