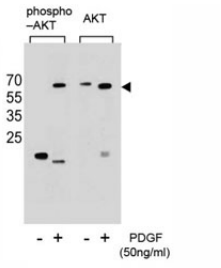
Phospho-AKT Antibody (pS473) (F48521)

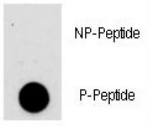
Catalog No.	Formulation	Size
F48521-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F48521-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P31749
Applications	Dot blot: 1:500 Western blot: 1:1000
Limitations	This phospho-AKT antibody is available for research use only.



Phospho-AKT (pS473) Antibody PDGF Treated NIH3T3 WB. Western blot analysis of extracts from NIH3T3 cells, untreated or treated with PDGF, using phospho-AKT antibody (left) or nonphos-AKT antibody (right).



Dot blot analysis of phospho-AKT antibody. 50ng of phos-peptide or nonphos-peptide per dot were spotted.

Description

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.

For a microarray-validated AKT1 antibody supporting high-specificity detection, see our AKT1 antibody (clone AKT1/2552).

Application Notes

Titration of the phospho-AKT antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

This phospho-AKT antibody was produced from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding pS473 of human AKT1.

Storage

Aliquot the phospho-AKT antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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