

Phospho-AKT1-S473 Rabbit pAb

Catalog No.: AP0140 **44 Publications**

Basic Information

Catalog No.

AP0140

Observed MW

60KDa

Calculated MW

48kDa/55kDa

Category

Primary antibody

Applications

WB, IHC

Cross-Reactivity

Human, Mouse, Rat

Recommended Dilutions

WB	1:500 - 1:2000
IHC	1:50 - 1:200

Contact

 | www.abclonal.com

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. Mutations in this gene have been associated with the Proteus syndrome. Multiple alternatively spliced transcript variants have been found for this gene.

Immunogen Information

Gene ID	Swiss Prot
207	P31749

Immunogen

A phospho specific peptide corresponding to residues surrounding S473 of human AKT1

Synonyms

AKT;CWS6;PKB;PKB-ALPHA;PRKBA;RAC;RAC-ALPHA;AKT1

Product Information

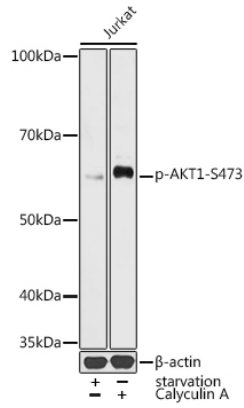
Source	Isotype	Purification
Rabbit	IgG	Affinity purification

Storage

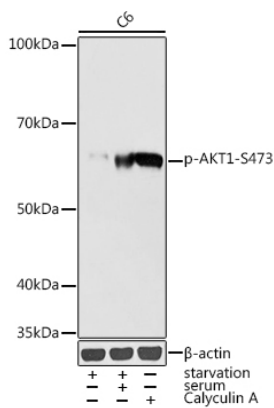
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.

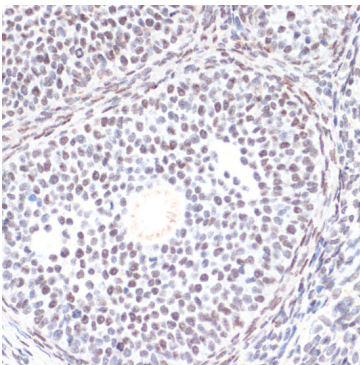
Validation Data



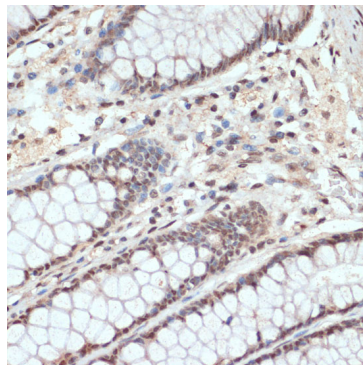
Western blot analysis of extracts of Jurkat cells, using Phospho-AKT1-S473 antibody (AP0140) at 1:1000 dilution. Jurkat cells were treated by Serum-starvation overnight at 37°C. Jurkat cells were treated by Calyculin A (100 nM) at 37°C for 30 minutes after serum-starvation overnight. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 1s.



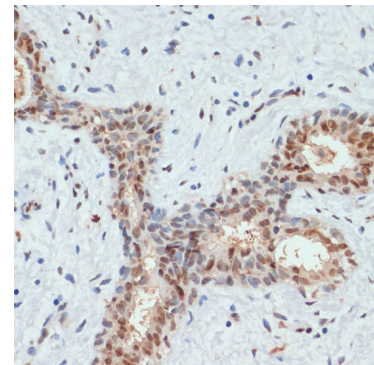
Western blot analysis of extracts of C6 cells, using Phospho-AKT1-S473 antibody (AP0140) at 1:1000 dilution. C6 cells were treated by Serum-starvation overnight at 37°C. C6 cells were treated by Calyculin A (100 nM) at 37°C for 30 minutes after serum-starvation overnight. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Enhanced Kit (RM00021). Exposure time: 10s.



Immunohistochemistry of paraffin-embedded rat ovary using Phospho-AKT1-S473 antibody (AP0140) at dilution of 1:200 (40x lens).



Immunohistochemistry of paraffin-embedded human colon using Phospho-AKT1-S473 antibody (AP0140) at dilution of 1:200 (40x lens).



Immunohistochemistry of paraffin-embedded human breast cancer using Phospho-AKT1-S473 antibody (AP0140) at dilution of 1:200 (40x lens).