

AP1453

Leader in Biomolecular Solutions for Life Science



Phospho-Akt-S473 Rabbit mAb

Catalog No.: AP1453

Recombinant

Basic Information

Observed MW

60kDa/

Calculated MW

48kDa/55kDa/51kDa/54kDa

Category

SMab Recombinant Monoclonal Antibody

Applications

WB,IHC-P,ELISA

Cross-Reactivity

Human,Mouse,Rat

CloneNo number

ARC5023-02

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. [provided by RefSeq, Jul 2011]

Recommended Dilutions

WB	1:500 - 1:1000
IHC-P	1:50 - 1:200

Immunogen Information

Gene ID

207/208/10000

Swiss Prot

P31749/P31751/Q9Y243

Immunogen

A synthetic phosphorylated peptide around S473 of human AKT1 (NP_005154.2).

Synonyms

AKT1/AKT2/AKT3; Phospho-Akt-S473

Contact



www.abclonal.com

Product Information

Source

Rabbit

Isotype

IgG

Purification

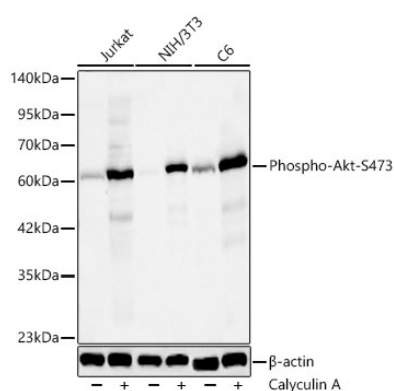
Affinity purification

Storage

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

Buffer: PBS with 0.05% proclin300,0.05% BSA,50% glycerol,pH7.3.

Validation Data



Western blot analysis of lysates from Jurkat, NIH/3T3, C6 cells using Phospho-Akt-S473 Rabbit mAb (AP1453) at 1:1000 dilution. Jurkat, NIH/3T3 and C6 cells were treated by Calyculin A (100 nM) at 37°C for 30 minutes.

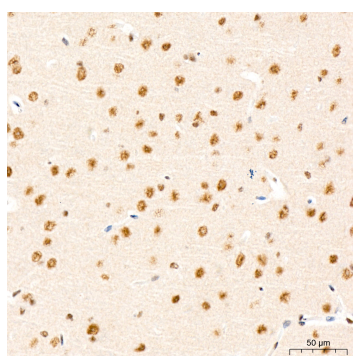
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25 µg per lane.

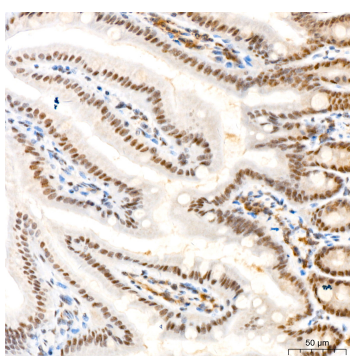
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

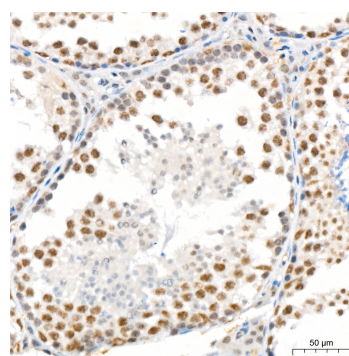
Exposure time: 20s.



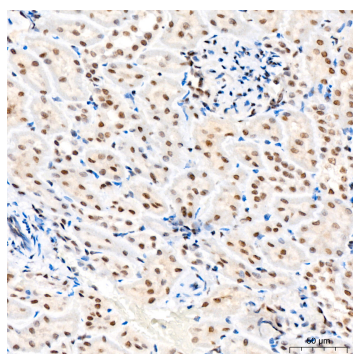
Immunohistochemistry analysis of Phospho-Akt-S473 in paraffin-embedded mouse brain tissue using Phospho-Akt-S473 Rabbit mAb (AP1453) at a dilution of 1:200 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



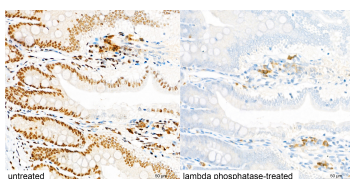
Immunohistochemistry analysis of Phospho-Akt-S473 in paraffin-embedded mouse colon tissue using Phospho-Akt-S473 Rabbit mAb (AP1453) at a dilution of 1:200 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



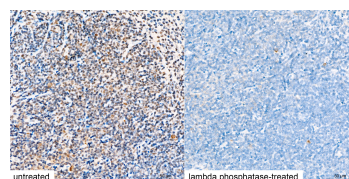
Immunohistochemistry analysis of Phospho-Akt-S473 in paraffin-embedded mouse testis tissue using Phospho-Akt-S473 Rabbit mAb (AP1453) at a dilution of 1:200 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of Phospho-Akt-S473 in paraffin-embedded rat kidney tissue using Phospho-Akt-S473 Rabbit mAb (AP1453) at a dilution of 1:200 (40x lens). High pressure antigen retrieval was performed with 0.01 M citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat intestine tissue, untreated (left) and lambda phosphatase-treated (right), using Phospho-Akt-S473 Rabbit mAb (AP1453) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse spleen tissue, untreated (left) and lambda phosphatase-treated (right), using Phospho-Akt-S473 Rabbit mAb (AP1453) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.