Phospho-AKT1-S473 pAb

Catalog No. AP0140

Category Phosphorylated Antibodies

Applications WB, IHC

Cross-reactivity Human, Mouse, Rat

Observed MW 56kDa

Calculated MW 48kDa/55kDa

Immunogen Information

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

Gene ID 207

Swiss prot P31749

Synonyms AKT1; AKT; CWS6; PKB; PKB-ALPHA; PRKBA; RAC; R AC-ALPHA; AKT serine/threonine kinase 1

Product information

Source Rabbit

Isotype IgG

Purification method Affinity purification

Storage Store at -20℃. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

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.

Recommended Dilutions

<table>
<thead>
<tr>
<th>Method</th>
<th>Dilution</th>
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</thead>
<tbody>
<tr>
<td>WB</td>
<td>1:500 - 1:2000</td>
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<tr>
<td>IHC</td>
<td>1:50 - 1:200</td>
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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). 

Western blot analysis of extracts from NIH/3T3 using Phospho-AKT1-S473 antibody (AP0140). Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% BSA.