**Phospho-AKT1-S473 pAb**

**Catalog No.** AP0098  
**Applications** WB, IP  
**Cross-reactivity** Human  
**Category** Phosphorylated Antibodies  
**Observed MW** 60kDa  
**Calculated MW** 48kDa/55kDa

### Immunogen Information

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

**Gene ID**
207

**Swiss prot**
P31749

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

### Product Information

**Source** Rabbit  
**Isotype** IgG  
**Purification method** Affinity purification  
**Storage** Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH 7.3.

### 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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<tbody>
<tr>
<td>WB</td>
<td>1:500 - 1:2000</td>
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<tr>
<td>IP</td>
<td>1:50 - 1:100</td>
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Western blot analysis of extracts of Jurkat cells, using Phospho-AKT1-S473 antibody (AP0098) at 1:2000 dilution. Jurkat cells were treated by Calyculin A (100nM) for 30 minutes. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% BSA. Detection: ECL Basic Kit (RM00020). Exposure time: 1s.

Immunoprecipitation analysis of 200ug extracts of Jurkat cells, using 3 ug Phospho-AKT1-S473 pAb (AP0098). Western blot was performed from the immunoprecipitate using Phospho-AKT1-S473 pAb (AP0098) at a dilution of 1:1000. Jurkat cells were treated by Calyculin A (100 nM) at 37°C for 30 minutes.