

**AM00107PU-N****Monoclonal Antibody to AKT1 / PKB non pSer473 (incl. pos. control) - Purified**

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                      |
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| <b>Alternate names:</b>              | Akt-1, C-AKT, Protein kinase B, RAC-PK-alpha, RAC-alpha serine/threonine-protein kinase                                                                                                                                                                                                                                                                                                              |
| <b>Quantity:</b>                     | 0.1 mg                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Background:</b>                   | The PKB (RAC/akt) protein kinases are a family of second messenger-regulated serine/threonine kinases.<br>Three mammalian isoforms (alpha, beta, gamma) have been identified so far; the alpha-isoform being the cellular homologue of the v-akt oncogene. Stimulation of cells with growth factors leads to activation of PKB by a phosphoinositide-3-kinase dependent signal transduction pathway. |
| <b>Uniprot ID:</b>                   | <a href="#">P31749</a>                                                                                                                                                                                                                                                                                                                                                                               |
| <b>NCBI:</b>                         | <a href="#">NP_001014431.1</a>                                                                                                                                                                                                                                                                                                                                                                       |
| <b>GeneID:</b>                       | <a href="#">207</a>                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Host / Isotype:</b>               | Mouse / IgG1                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Recommended Isotype Controls:</b> | SM10P (for use in human samples), SM20P (for use in rat samples), AM03095PU-N                                                                                                                                                                                                                                                                                                                        |
| <b>Clone:</b>                        | 11A11                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Immunogen:</b>                    | Synthetic peptide conjugated to KLH.<br>Epitope: C-terminus.<br><b>Remarks:</b> Molecular weight of antigen: 60 kDa                                                                                                                                                                                                                                                                                  |
| <b>Format:</b>                       | <b>State:</b> Lyophilized from 1 ml 2 x PBS / 0.09 % Na-azide / PEG and Sucrose.<br><b>Purification:</b> Subsequent thiophilic adsorption and size exclusion chromatography<br><b>Reconstitution:</b> Restore with 1 ml H2O (15 min, RT).                                                                                                                                                            |
| <b>Applications:</b>                 | Suitable for Western blot: 0.5 µg/ml for HRPO/ECL detection.<br>Recommended buffer: Casein/Tween 20 based blocking and blot incubation buffer.<br>Use cell lysate from untreated HepG2 cells (provided with this antibody).<br>ELISA: 0.05 µg/ml.<br>Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.                              |
| <b>Specificity:</b>                  | 11A11 specifically recognizes PKB when it is dephosphorylated at serine 473.<br><b>Species:</b> Human, mouse, rat, dog.<br>Other species not tested.                                                                                                                                                                                                                                                 |
| <b>Add. Information:</b>             | A positive control cell lysate is provided - please see "Protocols" for details.                                                                                                                                                                                                                                                                                                                     |
| <b>Storage:</b>                      | For long-term storage, freeze lyophilizate upon arrival (-20°C). Upon reconstitution, aliquote and freeze in liquid nitrogen; reconstituted antibody can be stored frozen at -80°C up to 1 year. Thaw aliquots at 37°C. Thawed aliquots may be stored at 4°C up to 3 months. Avoid repeated freeze / thaw cycles.                                                                                    |

**Protocols:**

POSITIVE CONTROL CELL LYSATE: HepG2 untreated

Format:

Lyophilized cell lysate from serum starved HepG2 cells

Reconstitution:

Restore by addition of 200 µl H<sub>2</sub>O. After complete solubilization add 200 µl 2x SDS-PAGE sample buffer, mix and incubate at 90°C for 5 min.

Aliquote and store frozen, avoid repeated freezing and thawing.

Application:

The positive control cell lysate is recommended for immunoblot applications. 20 µl of positive control cell lysate correspond to ca. 80.000 cells.

Use 20 µl / lane (mini gel) for HRPO/ECL detection of the target proteins.

PLEASE NOTE:

The lyophilized cell lysates contain SDS and are NOT recommended for applications with native proteins such as immunoprecipitation.

**Pictures:**

Detection of endogenous PKB: Whole cell lysates of serum starved tumor cells

(20.000 cells per lane) were applied to SDS-PAGE and transferred to a PVDF membrane. The immunoblot was probed with mab 11A11 (1 µg/ ml) for 1h at RT and developed by ECL (exp. time: 30 sec).

lane 1: HeLa; lane 2: HepG2; lane 3: HEK293; lane 4: SH-SY5Y; lane 5: MDCK; lane 6: PC12; lane 7: CMT; lane 8: Neuro 2A; lane 9: 3T3

