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# Product datasheet for TA319557

## AKT2 Rat Monoclonal Antibody [Clone ID: 16G11.A7]

### Product data:

| | |
|---|---|
| **Product Type:** | Primary Antibodies |
| **Clone Name:** | 16G11.A7 |
| **Applications:** | WB |
| **Recommended Dilution:** | ELISA: 1:2,000 - 1:10,000, WB: 1:500- 1:2000, IHC: 20 ug/mL |
| **Reactivity:** | Human |
| **Host:** | Rat |
| **Clonality:** | Monoclonal |
| **Immunogen:** | Anti-AKT2 Antibody was produced by repeated immunizations with a synthetic peptide corresponding to internal residues of human AKT2 protein. |
| **Formulation:** | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| **Concentration:** | lot specific |
| **Conjugation:** | Unconjugated |
| **Storage:** | Store at -20°C as received. |
| **Stability:** | Stable for 12 months from date of receipt. |
| **Gene Name:** | AKT serine/threonine kinase 2 |
| **Database Link:** | NP_001229956<br>Entrez Gene 208 Human<br>P31751 |
| **Synonyms:** | HIHGHH; PKBB; PKBBETA; PRKBB; RAC-BETA |

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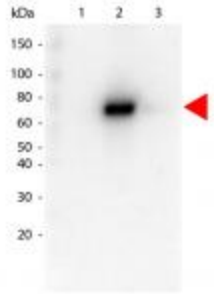
**Note:** AKT2 Antibody detects AKT2 which is a component of the PI-3 kinase pathway and is activated by phosphorylation at Ser 473 and Thr 308. AKT is a cytoplasmic protein also known as Protein Kinase B (PKB) and rac (related to A and C kinases). AKT is a key regulator of many signal transduction pathways. AKT Exhibits tight control over cell proliferation and cell viability. Overexpression or inappropriate activation of AKT is noted in many types of cancer. AKT mediates many of the downstream events of PI 3-kinase (a lipid kinase activated by growth factors, cytokines and insulin). PI 3-kinase recruits AKT to the membrane, where it is activated by PDK1 phosphorylation. Once phosphorylated, AKT dissociates from the membrane and phosphorylates targets in the cytoplasm and the cell nucleus. AKT has two main roles: (i) inhibition of apoptosis; (ii) promotion of proliferation. Anti-AKT2 Antibody is ideal for investigators involved in Cell Signaling, Neuroscience, Signal Transduction research.

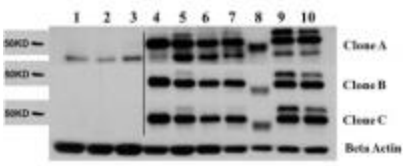
**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase

**Protein Pathways:** Acute myeloid leukemia, Adipocytokine signaling pathway, Apoptosis, B cell receptor signaling pathway, Chemokine signaling pathway, Chronic myeloid leukemia, Colorectal cancer, Endometrial cancer, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Glioma, Insulin signaling pathway, Jak-STAT signaling pathway, MAPK signaling pathway, Melanoma, mTOR signaling pathway, Neurotrophin signaling pathway, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Progesterone-mediated oocyte maturation, Prostate cancer, Renal cell carcinoma, Small cell lung cancer, T cell receptor signaling pathway, Tight junction, Toll-like receptor signaling pathway, VEGF signaling pathway

## Product images:




Western Blot of Rat anti-AKT2 antibody. Lane 1: GST Tagged recombinant AKT1. Lane 2: GST Tagged recombinant AKT2. Lane 3: GST Tagged recombinant AKT3. Load: 25 ng per lane. Primary antibody: AKT2 antibody at 1:1,000 for overnight at 4°C. Secondary antibody: Peroxidase rat secondary antibody at 1:40,000 for 30 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: 78 kDa for AKT2. Other band (s): none.




Western Blot of Rat Anti-AKT2 antibody. Lane 1: C2C12. Lane 2: MEF#1. Lane 3: MEF#2. Lane 4: A549. Lane 5: Calu-1. Lane 6: PC3. Lane 7: HepG2. Lane 8: Jurkat. Lane 9: SKOV3. Lane 10: 293T. Load: 35 ug per lane. Primary antibody: AKT-2 antibody at 1:1000 for overnight at 4°C. Secondary antibody: Rat secondary antibody at 1:20,000 for 1 h at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 56 kDa for AKT2.