

## Product datasheet for **TA319278**

### AKT1 Sheep Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	ELISA: 1:5,000 - 1:20,000, WB: 1:500 - 1:2,000, IHC: user optimized, IF: user optimized
Reactivity:	Human
Host:	Sheep
Clonality:	Polyclonal
Immunogen:	Anti-AKT antibody was affinity purified antibody was prepared by repeated immunizations with a synthetic peptide corresponding to an internal region of human AKT1 protein. A residue of cysteine was added to facilitate coupling.
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 1
Database Link:	<a href="#">NP_001014431</a> <a href="#">Entrez Gene 207 Human</a> <a href="#">P31749</a>
Synonyms:	AKT; CWS6; PKB; PKB-ALPHA; PRKBA; RAC; RAC-ALPHA



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**Note:** AKT 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-AKT 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 Rabbit Anti-AKT Antibody. Lane 1: HeLa cells. Lane 2: H<sub>2</sub>O<sub>2</sub> treated MCF7 cells. Lane 3: Recombinant AKT. Lane 4: A431 cells. Load: 35 ug per lane. Primary antibody: AKT antibody at 1:300 for overnight at 4°C. Secondary antibody: IRDYE800™ conjugated Dnky-a-Sheep IgG was used at a 1:10,000 dilution for 45 min at room temperature. Block: 1% BLOTTO overnight at 4°C. Predicted/Observed size: ~55-60 kDa for AKT. Other band (s): unspecific.