

## Product datasheet for **TA325215**

### AKT1 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:500-1:2000; IHC: 1:50-1:200; IF: 1:100-1:500
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The antiserum was produced against a synthesized A synthesized peptide derived from human Akt.
Formulation:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration:	lot specific
Purification:	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific peptide.
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 11651 Mouse</a> <a href="#">Entrez Gene 24185 Rat</a> <a href="#">Entrez Gene 207 Human</a> <a href="#">P31749</a>

**Background:** Akt1 an oncogenic AGC kinase that plays a critical role in regulating cell survival and metabolism in many different signaling pathways. Dual phosphorylation is required for its activation. T308 is phosphorylated by PDK1 in the PI3 kinase pathway, and S473 is phosphorylated by mTOR in the mTORC2 pathway. The 'Lys-63'-linked ubiquitination of AKT1 by TRAF6 is important for its translocation to the plasma membrane, phosphorylation, and activation. When Akt is fully phosphorylated it translocates into the nucleus, undergoes 'Lys-48'-polyubiquitination catalyzed by TTC3, leading to its proteosomal degradation.



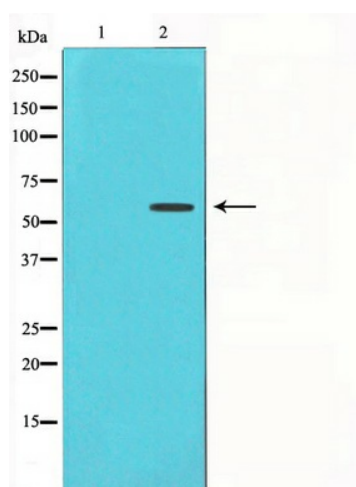
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**Synonyms:** AKT; CWS6; PKB; PKB-ALPHA; PRKBA; RAC; RAC-ALPHA

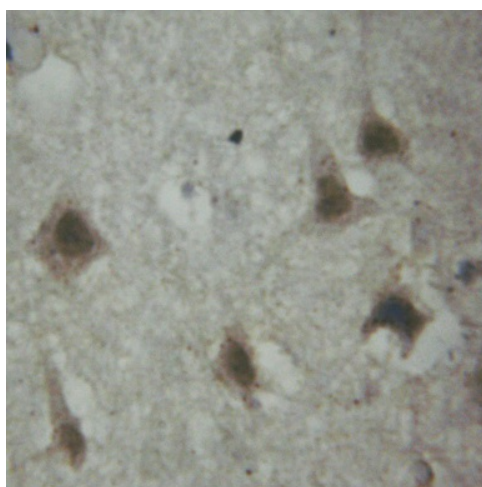
**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase

**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 analysis on 293 cell lysate using Akt Antibody



Immunohistochemical analysis of paraffin-embedded human brain tissue using Akt Antibody.