

Product datasheet for **TA319560**

AKT1 Mouse Monoclonal Antibody [Clone ID: 18F10.E5]

Product data:

Product Type:	Primary Antibodies
Clone Name:	18F10.E5
Applications:	WB
Recommended Dilution:	ELISA: 1:20,000, WB: 1:500 - 1:3,000, IHC: 20 ug/mL
Reactivity:	Human, Mouse, Rat, Chimpanzee
Host:	Mouse
Clonality:	Monoclonal
Immunogen:	Anti-AKT Antibody was produced by repeated immunizations with a synthetic peptide corresponding to residues near the C terminal end of of human AKT1 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 1
Database Link:	NP_001014431 Entrez Gene 11651 Mouse Entrez Gene 24185 Rat Entrez Gene 207 Human P31749
Synonyms:	AKT; CWS6; PKB; PKB-ALPHA; PRKBA; RAC; RAC-ALPHA



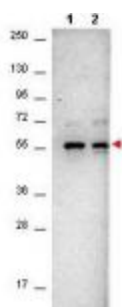
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Note: AKT is a component of the PI-3 kinase pathway and is activated by phosphorylation at Ser 473 and Thr 308. AKT is a cytoplasmic protein also known as AKT1, Protein Kinase B (PKB) and rac (related to A and C kinases). AKT is a key regulator of 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:



WB of Mouse anti-AKT antibody. Lane 1: unstimulated NIH/3T3 cell lysates. Lane 2: PDGF stimulated NIH/3T3 cell lysates. Load: 10 ug per lane. Primary antibody: AKT antibody at 1:400 for overnight at 4°C. Secondary antibody: HRP conjugated Gt-a-Mouse IgG (p/n 610-103-121) was used at a 1:40,000 dilution for 1 h at 4°C with FemtoMax™ enhanced chemiluminescent reagent (p/n FEMTOMAX-100). Block: 5% BLOTTO (p/n [B501-0500] in TBS for 2h at RT. Observed size: ~56 kDa for AKT. Other band (s): none.