

Product datasheet for **TA396841**

AKT1 Mouse Monoclonal Antibody [Clone ID: 14E5.A2.B2.H9]

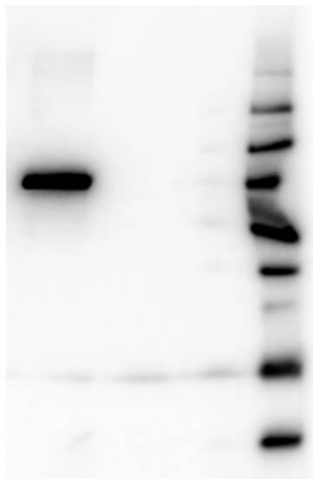
Product data:

Product Type:	Primary Antibodies
Clone Name:	14E5.A2.B2.H9
Applications:	ELISA, FC, IF, IHC, WB
Recommended Dilution:	WB: User Optimized IHC: User Optimized IF: User Optimized FC: User Optimized ELISA: User Optimized
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG2a, kappa
Clonality:	Monoclonal
Immunogen:	Anti-AKT1 Antibody was produced in mice by repeated immunizations with a synthetic peptide corresponding to internal residues of human AKT1 protein followed by monoclonal development.
Specificity:	Anti-AKT1 antibody is directed against human AKT1. The antibody detects both unphosphorylated and phosphorylated forms of the protein. Anti-AKT1 antibody was purified from ascites by Protein A chromatography. Cross reactivity with AKT1 from other species has not been determined, however, the sequence of the immunogen shows 85% identity to mouse and 92% identity with rat, therefore, cross reactivity is expected.
Formulation:	0.02 M Potassium Phosphate, 0.5 M Sodium Chloride, pH 7.2
Reconstitution Method:	Restore with deionized water (or equivalent) - Reconstitution Volume: 50µL
Concentration:	1.0 mg/mL - lot specific
Conjugation:	Biotin
Storage:	Store vial at 4° C prior to restoration. Restore with deionized water (or equivalent). For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. Expiration date is one (1) year from date of restoration.



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Stability:	Expiration date is one (1) year from date of receipt.
Gene Name:	AKT serine/threonine kinase 1
Database Link:	Entrez Gene 207 Human P31749
Background:	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-AKT1 (MOUSE) PE conjugated Monoclonal Antibody is ideal for investigators involved in Cell Signaling, Cancer, Neuroscience, Signal Transduction research.
Synonyms:	mouse anti-AKT1 antibody biotin conjugation, biotin conjugated mouse anti-AKT-1 antibody, AKT-1, PKB antibody, PKB gamma antibody, PKBGAMMA antibody, PRKKBG antibody, Protein kinase Akt 1 antibody, Protein kinase B gamma antibody, RAC-gamma serine/threonine-protein kinase, RAC-PK-gamma
Note:	Anti-AKT1 BIOTIN Antibody is suitable for Flow Cytometry, ELISA, immunohistochemistry, and western blotting. Expect a band approximately 56 kDa in size corresponding to AKT1 protein by western blotting in the appropriate cell lysate or extract. This monoclonal antibody reacts with human AKT. Specific conditions for reactivity should be optimized by the end user. For immunohistochemistry we recommend the use of fresh frozen tissues. Attempts at staining paraffin-embedded formalin fixed tissues were negative. No pre-treatment of sample is required.

Product images:

Western Blot of Mouse anti-AKT1 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: AKT1 unconjugated antibody at 1:1,000 for overnight at 4°C. Secondary antibody: Peroxidase Rabbit 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.