

AR08011PU-N**Human AKT1 / PKB (Substrate) - Purified**

Alternate names:	Akt-1, C-AKT, Protein kinase B, RAC-PK-alpha, RAC-alpha serine/threonine-protein kinase
Quantity:	0.5 mg
Concentration:	1.0 mg/ml (by weight)
Background:	Akt is a serine/threonine kinase that enhances cell proliferation and inhibits apoptosis when activated. Akt associates with PI(3,4,5)P3 at the cell membrane through its pleckstrin homology domain and is activated through phosphorylation. 3-Phosphoinositide-dependent kinase-1 (PDK1) has been shown to first phosphorylate Akt at Thr308, then a second kinase phosphorylates Akt at position Ser473. In turn, Akt phosphorylates a host of proteins including the proapoptotic proteins BAD and pro-caspase-9, GSK3, p21WAF1, MDM2, and the forkhead (FKHR) family of transcription factors.
Uniprot ID:	P31749
NCBI:	NP_001014431
GenelD:	207
Species:	Human
Format:	State: Liquid sterile filtered peptide Purity: >98% pure by HPLC analysis.
Applications:	Western Blot: 1/500-1/2,000. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Description:	A specific substrate for Protein Kinase B alpha (PKB alpha, AKT; Km = 5 µM). This peptide is not phosphorylated by p70 S6 kinase or MAP kinase activated protein (MAPKAP) kinase-1. Molecular weight: 817 Da
Storage:	Store the antibody (in aliquots) at -70°C or below prior to opening. Avoid repeated freezing and thawing. Shelf life: 6 month from despatch.
General Readings:	1. Alessi DR, Caudwell FB, Andjelkovic M, Hemmings BA, Cohen P. Molecular basis for the substrate specificity of protein kinase B; comparison with MAPKAP kinase-1 and p70 S6 kinase. FEBS Lett. 1996 Dec 16;399(3):333-8. PubMed PMID: 8985174.