



Human AKT1 blocking peptide (CDBP0364)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	AKT (C - term) peptide (human)
Antigen Description	The serine-threonine protein kinase encoded by the AKT1 gene is catalytically inactive in serum-starved primary and immortalized fibroblasts. AKT1 and the related AKT2 are activated by platelet-derived growth factor. The activation is rapid and specific, and it is abrogated by mutations in the pleckstrin homology domain of AKT1. It was shown that the activation occurs through phosphatidylinositol 3-kinase. In the developing nervous system AKT is a critical mediator of growth factor-induced neuronal survival. Survival factors can suppress apoptosis in a transcription-independent manner by activating the serine/threonine kinase AKT1, which then phosphorylates and inactivates components of the apoptotic machinery. Mutations in this gene have been associated with the Proteus syndrome. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jul 2011]
Species	Human
Conjugate	Unconjugated
Applications	BL
Concentration	1 mg/ml
Size	50 µg
Buffer	PBS with 0.02% sodium azide
Preservative	0.02% Sodium Azide
Storage	Upon Receipt - Keep as concentrated solution. Aliquot and store at -20°C or below. Avoid freeze-thaw cycles.

GENE INFORMATION

Gene Name	AKT1 v-akt murine thymoma viral oncogene homolog 1 [Homo sapiens (human)]
Official Symbol	AKT1
Synonyms	AKT1; v-akt murine thymoma viral oncogene homolog 1; AKT; PKB; RAC; CWS6; PRKBA; PKB-ALPHA; RAC-ALPHA; RAC-alpha serine/threonine-protein kinase; PKB alpha; RAC-PK-alpha; proto-oncogene c-Akt; protein kinase B alpha; rac protein kinase alpha;
Entrez Gene ID	207
mRNA Refseq	NM_001014431.1
Protein Refseq	NP_001014431.1
UniProt ID	B0LPE5
Chromosome Location	14q32.32
Pathway	AGE/RAGE pathway, organism-specific biosystem; AKT phosphorylates targets in the cytosol, organism-specific biosystem; AKT phosphorylates targets in the nucleus, organism-specific biosystem; AKT-mediated inactivation of FOXO1A, organism-specific biosystem; AMPK signaling, organism-specific biosystem; Activation of BAD and translocation to mitochondria, organism-specific biosystem; Activation of BH3-only proteins, organism-specific biosystem; Acute myeloid leukemia, organism-specific biosystem; A
Function	14-3-3 protein binding; ATP binding; ATP binding; enzyme binding; identical protein binding; kinase activity; nitric-oxide synthase regulator activity; phosphatidylinositol-3,4,5-trisphosphate binding; phosphatidylinositol-3,4-bisphosphate binding; protei