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# AKT3 Blocking Peptide (N-term)

**Synthetic peptide**
**Catalog # BP7030a**

## Specification

### AKT3 Blocking Peptide (N-term) - Product Information

| | |
|---|---|
| Primary Accession | Q9Y243 |
| Other Accession | Q63484, Q9WUA6 |

### AKT3 Blocking Peptide (N-term) - Additional Information

**Gene ID** 10000

**Other Names**
RAC-gamma serine/threonine-protein kinase, Protein kinase Akt-3, Protein kinase B gamma, PKB gamma, RAC-PK-gamma, STK-2, AKT3, PKBG

**Target/Specificity**
The synthetic peptide sequence is selected from aa 105-118 of HUMAN AKT3

**Format**
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### AKT3 Blocking Peptide (N-term) - Protein Information

**Name** AKT3

**Synonyms** PKBG

**Function**
AKT3 is one of 3 closely related serine/threonine-protein kinases (AKT1, AKT2 and AKT3) called the AKT kinase, and which regulate many processes including metabolism, proliferation, cell survival, growth and angiogenesis. This is mediated through serine and/or threonine phosphorylation of a range of downstream substrates. Over 100 substrate candidates have been reported so far, but for most of them, no isoform specificity has been reported. AKT3 is the least studied AKT isoform. It plays an important role in brain development and is crucial for the viability of malignant glioma cells. AKT3 isoform may also be the key molecule in up-regulation and down-regulation of MMP13 via IL13. Required for the coordination of mitochondrial biogenesis with growth factor-induced increases in cellular energy demands. Down- regulation by RNA interference reduces the expression of the phosphorylated form of BAD, resulting in the induction of caspase- dependent apoptosis.

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**Cellular Location**
Nucleus. Cytoplasm. Membrane; Peripheral membrane protein Note=Membrane-associated after cell stimulation leading to its translocation

**Tissue Location**
In adult tissues, it is highly expressed in brain, lung and kidney, but weakly in heart, testis and liver. In fetal tissues, it is highly expressed in heart, liver and brain and not at all in kidney

## AKT3 Blocking Peptide (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

## AKT3 Blocking Peptide (N-term) - Images

## AKT3 Blocking Peptide (N-term) - Background

AKT3 is a member of the AKT, also called PKB, serine/threonine protein kinase family. AKT kinases are known to be regulators of cell signaling in response to insulin and growth factors. They are involved in a wide variety of biological processes including cell proliferation, differentiation, apoptosis, tumorigenesis, as well as glycogen synthesis and glucose uptake. This kinase has been shown to be stimulated by platelet-derived growth factor (PDGF), insulin, and insulin-like growth factor 1 (IGF1).

## AKT3 Blocking Peptide (N-term) - References

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Deregibus, M.C., et al., J. Biol. Chem. 277(28):25195-25202 (2002).
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