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AIK3 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP8647b

Specification

AIK3 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession	Q9Y243
Other Accession	NP_005456

AIK3 Antibody (C-term) Blocking Peptide - 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 used to generate the antibody AP8647b was selected from the C-term region of human AIK3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

AIK3 Antibody (C-term) Blocking Peptide - 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.

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

AIK3 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

AIK3 Antibody (C-term) Blocking Peptide - Images

AIK3 Antibody (C-term) Blocking Peptide - Background

AIK3 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).

AIK3 Antibody (C-term) Blocking Peptide - References

Walker,K.S., et.al., Biochem. J. 331 (PT 1), 299-308 (1998)Nakatani,K., et.al., Biochem. Biophys. Res. Commun. 257 (3), 906-910 (1999)