

AKT3 Antibody (aa119-136)

Rabbit Polyclonal Antibody Catalog # ALS13635

Specification

AKT3 Antibody (aa119-136) - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

O9Y243
Human, Mouse, Rat
Rabbit
Polyclonal
56kDa KDa
WB~~1:1000
IHC-P~~N/A

WB, IHC-P

AKT3 Antibody (aa119-136) - Additional Information

Gene ID 10000

Dilution

Other Names

RAC-gamma serine/threonine-protein kinase, 2.7.11.1, Protein kinase Akt-3, Protein kinase B gamma, PKB gamma, RAC-PK-gamma, STK-2, AKT3, PKBG

Target/Specificity

A synthetic peptide corresponding to amino acid residues 119-136 of human Akt3. This sequence is identical in human, mouse and rat.

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions

AKT3 Antibody (aa119-136) is for research use only and not for use in diagnostic or therapeutic procedures.

AKT3 Antibody (aa119-136) - 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

Volume

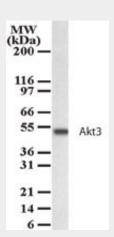
50 µl

AKT3 Antibody (aa119-136) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

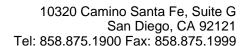
AKT3 Antibody (aa119-136) - Images



Western blot analysis for AKT3 using antibody at 2 ug/ml dilution against 15 ug/lane of HeLa...

AKT3 Antibody (aa119-136) - Background

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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.

AKT3 Antibody (aa119-136) - References

Brodbeck D.,et al.J. Biol. Chem. 274:9133-9136(1999).

Nakatani K.,et al.Biochem. Biophys. Res. Commun. 257:906-910(1999).

Masure S.,et al.Eur. J. Biochem. 265:353-360(1999).

Li X.,et al.Submitted (AUG-1998) to the EMBL/GenBank/DDBJ databases.

Wiemann S.,et al.Genome Res. 11:422-435(2001).