

Rabbit AKT3 Polyclonal Antibody | anti-AKT3 antibody

AKT3 Antibody

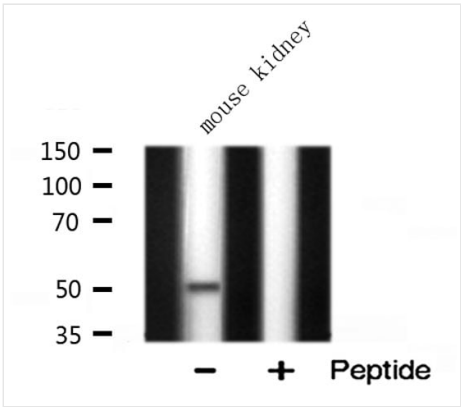
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA323523	Rabbit	Human, Mouse, Rat	ELISA, Western Blot

PRODUCT SYNONYMS

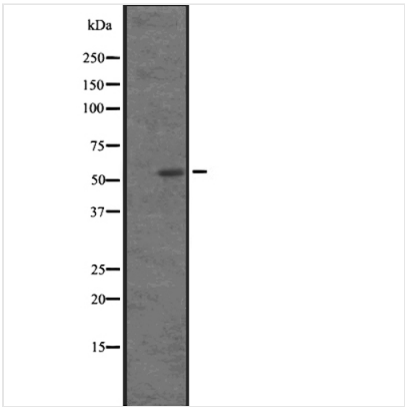
AKT3; Polyclonal Antibody; AKT3 Antibody; Akt3; AKT3 kinase; AKT3_HUMAN; DKFZp434N0250; MPPH; PKB gamma; PKBG; PRKBG; Protein kinase Akt-3; Protein Kinase AKT3; Protein kinase B gamma; RAC gamma; RAC gamma serine/threonine protein kinase; RAC-gamma serine/threonine-protein kinase; RAC-PK-gamma; RACPK Gamma; Serine threonine protein kinase Akt 3; Serine threonine protein kinase Akt3; STK 2; STK-2; STK2; V akt murine thymoma viral oncogene homolog 3 (protein kinase B; gamma); V akt murine thymoma viral oncogene homolog 3; V akt murine thymoma viral oncogene homolog 3 protein kinase B gamma; anti-AKT3 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	AKT3 antibody detects endogenous levels of total AKT3
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	465
Applicable Applications for anti-AKT3 antibody	ELISA, WB (Western Blot)
Immunogen	A synthesized peptide
Subcellular Location	Cytoplasm. Membrane. Membrane-associated after cell stimulation leading to its translocation.
Tissue Specificity	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.
Conjugation	Unconjugated



WB (Western Blot)
Western blot analysis of AKT3 expression in Mouse kidney lysate



WB (Western Blot)
Western blot analysis of AKT3 expression in NIH3T3 whole cell lysate ; The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-AKT3 antibody	Description: Plays a role as a key modulator of the AKT-mTOR signaling pathway controlling the tempo of the process of newborn neurons integration during adult neurogenesis, including correct neuron positioning, dendritic development and synapse formation (By similarity). General protein kinase capable of phosphorylating several known proteins. Phosphorylates TBC1D4. Signals downstream of phosphatidylinositol 3-kinase (PI(3)K) to mediate the effects of various growth factors such as platelet-derived growth factor (PDGF), epidermal growth factor (EGF), insulin and insulin-like growth factor I (IGF-I). Plays a role in glucose transport by mediating insulin-induced translocation of the GLUT4 glucose transporter to the cell surface. Mediates the antiapoptotic effects of IGF-I. Mediates insulin-stimulated protein synthesis by phosphorylating TSC2 at 'Ser-939' and 'Thr-1462', thereby activating mTORC1 signaling and leading to both phosphorylation of 4E-BP1 and in activation of RPS6KB1. Promotes glycogen synthesis by mediating the insulin-induced activation of glycogen synthase. The activated form can suppress FoxO gene transcription and promote cell cycle progression. Essential for the SPATA13-mediated regulation of cell migration and adhesion assembly and disassembly. 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. Subunit Structure: Interacts (via PH domain) with TCL1A; this enhances AKT3 phosphorylation and activation. Interacts with TRAF6. Interacts with KCTD20 (By similarity). Interacts with BTBD10 (By similarity). Post-translational Modifications: Phosphorylation on Thr-305 and Ser-472 is required for full activity. Ubiquitinated. When fully phosphorylated and translocated into the nucleus, undergoes 'Lys-48'-polyubiquitination catalyzed by TTC3, leading to its degradation by the proteasome. O-GlcNAcylation at Thr-302 and Thr-309 inhibits activating phosphorylation at Thr-305 via disrupting the interaction between AKT and PDK1. Similarity: Binding of the PH domain to the phosphatidylinositol 3-kinase alpha (PI3K) results in its targeting to the plasma membrane. Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. RAC subfamily.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	332078559
NCBI GeneID	10000
NCBI Accession #	NP_001193658.1
NCBI GenBank Nucleotide #	NM_001206729.1
UniProt Accession #	Q9Y243; Q0VAA6; Q5VT11; Q5VT12; Q96QV3; Q9UFP5

Molecular Weight	Observed: 56 kDa Predicted: 56 kDa
NCBI Official Full Name	RAC-gamma serine/threonine-protein kinase isoform 2
NCBI Official Synonym Full Names	AKT serine/threonine kinase 3
NCBI Official Symbol	AKT3
NCBI Official Synonym Symbols	MPPH; PKBG; MPPH2; PRKBG; STK-2; PKB-GAMMA; RAC-gamma; RAC-PK-gamma
NCBI Protein Information	RAC-gamma serine/threonine-protein kinase
UniProt Protein Name	RAC-gamma serine/threonine-protein kinase
UniProt Gene Name	AKT3
UniProt Synonym Gene Names	PKBG; PKB gamma

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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 Online datasheet: <https://stage.aaabiotech.com/polyclonal/akt3-antibody-western-blot-elisa/323523>