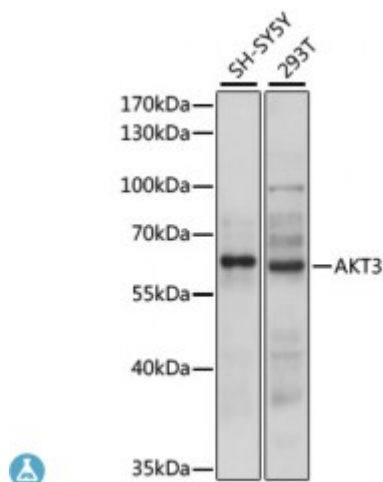


Anti-AKT3 Antibody



Description

The protein encoded by this gene 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). Alternatively splice transcript variants encoding distinct isoforms have been described.

Model	STJ114775
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 93-154 of human AKT3 (NP_859029.1).
Gene ID	10000
Gene Symbol	AKT3
Dilution range	WB 1:500 - 1:2000
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
Purification	Affinity purification
Note	For Research Use Only (RUO).

Protein Name	RAC-gamma serine/threonine-protein kinase
Molecular Weight	55.775 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:393OMIM:611223Reactome:R-HSA-111447
Alternative Names	RAC-gamma serine/threonine-protein kinase
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 Localization	Nucleus,
Post-translational Modifications	Phosphorylation on Thr-305 and Ser-472 is required for full activity,