

Product Name: AKT Rabbit Monoclonal Antibody**Catalog #: AMRe85267**

For research use only.

Summary

Description	Recombinant rabbit monoclonal antibody
Host	Rabbit
Application	WB, ICC
Reactivity	Human, Mouse, Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Concentration	0.62mg/ml. The concentration of this product may be batch-dependent.
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in TBS with 0.05% sodium azide, 0.05% protective protein and 50% glycerol.
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:1000, ICC 1:50-1:200
Molecular Weight	Calculated MW: 56 kDa; Observed MW: 56 kDa

Antigen Information

Gene Name	AKT
Alternative Names	MPPH; PKBG; MPPH2; PRKBG; STK-2; PKB-GAMMA; RAC-gamma; RAC-PK-gamma
Gene ID	10000.0
SwissProt ID	Q9Y243
Immunogen	A synthetic peptide of human AKT1/2/3

Background

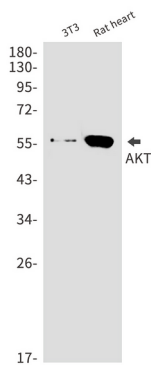
AKT3 is one of 3 closely related serine/threonine-protein kinases (AKT1, AKT2 and AKT3) called the AKT kinase, and which regulate many processes including metabolism, proliferation, cell survival, growth and angiogenesis. This is mediated through serine and/or threonine phosphorylation of a range of 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.

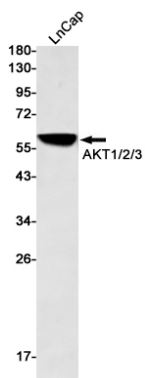
Research Area

PI3K-Akt signaling pathway, MAPK signaling pathway, Jak-STAT signaling pathway

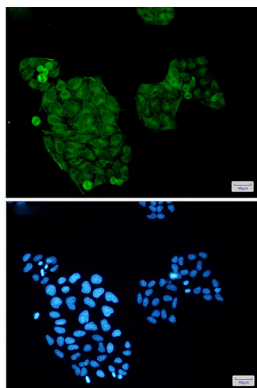
Image Data



Western blot analysis of AKT in 3T3, rat heart lysates using AKT antibody.



Western blot analysis of AKT1/2/3 in LnCap lysates using AKT antibody.



Immunocytochemistry analysis of AKT1/2/3 (green) in Hela using AKT antibody, and DAPI (blue)