

AKT recombinant antibody

Recombinant Phospho-AKT (Ser473) Antibody, Rabbit Monoclonal

CATALOG # AAA27779	HOST Rabbit	REACTIVITY Human, Mouse	APPLICATIONS Western Blot, Immunohistochemistry
------------------------------	-----------------------	-----------------------------------	---

PRODUCT SYNONYMS

AKT; Monoclonal Recombinant Antibody; Recombinant Phospho-AKT (Ser473) Antibody; Rabbit Monoclonal; v-akt murine thymoma viral oncogene homolog 1; Anti-AKT Antibody; Anti-CWS6 Antibody; Anti-PKB Antibody; Anti-PKB-ALPHA Antibody; Anti-PRKBA Antibody; Anti-RAC Antibody; Anti-RAC-ALPHA Antibody; AKT recombinant antibody

PRODUCT SPECIFICATIONS

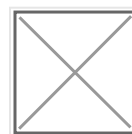
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Number	#0113
Specificity	Human Phospho-AKT (Ser473)
Purity/Purification	Protein A
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for AKT recombinant antibody	WB (Western Blot), IHC (Immunohistochemistry)
Application Notes	WB: 1:1000-1:200000 IHC-P: 1:100-1:400
Immunogen	A synthetic phosphopeptide corresponding to residues around Ser473 of human AKT.
Preparation	The antibody is produced by immunizing rabbits with a synthetic phosphopeptide corresponding to residues around Ser473 of human AKT.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.

IMAGES



WB (Western Blot)

Western blot analysis of extracts from serum-starved NIH-3T3, untreated (line A); treated with PDGFA (5 ug/mL, 5 min), without peptide (line B) or antigen-specific phosphopeptide (line C) or antigen-specific peptide (line D) using Phospho-AKT (Ser473) rabbit monoclonal Antibody (#AAA27779) at 1:2000 dilution.



WB (Western Blot)

Western blot analysis of extracts from serum-starved NIH-3T3, untreated (-); treated with PDGFA (5 ug/mL, 5 min; +), using Phospho-AKT (Ser473) rabbit monoclonal Antibody (#AAA27779) at 1:2000 dilution (upper) or anti-Akt antibody (lower).



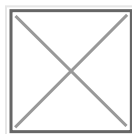
WB (Western Blot)

Western blot analysis of extracts from serum-starved A431, untreated (-); treated with EGF (200 ng/mL, 15 min; +), using Phospho-AKT (Ser473) rabbit monoclonal Antibody (#AAA27779) at 1:2000 dilution (upper) or anti-Akt antibody (lower).



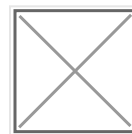
WB (Western Blot)

Western blot analysis of extracts from serum-starved NIH-3T3 treated with PDGFA (5 ug/mL, 5 min; +), using Phospho-AKT (Ser473) rabbit monoclonal Antibody (#AAA27779) at 1:1000, 1:50000, 1:200000 dilution.



IHC (Immunohistochemistry-Paraffin)

Immunohistochemical analysis of paraffin-embedded human breast cancer tissue, untreated (left) or lambda phosphatase-treated (right), using Recombinant Phospho-AKT (Ser473) Antibody, Rabbit Monoclonal (#AAA27779) at 1:200 dilution.



IHC (Immunohistochemistry-Paraffin)

Immunohistochemical analysis of paraffin-embedded human lung cancer tissue, untreated (left) or lambda phosphatase-treated (right), using Recombinant Phospho-AKT (Ser473) Antibody, Rabbit Monoclonal (#AAA27779) at 1:200 dilution.

ADDITIONAL INFORMATION

Related Product Information for AKT recombinant antibody

v-akt murine thymoma viral oncogene homolog 1 (AKT1), or protein kinase B-alpha (PKB-ALPHA) is a serine-threonine protein kinase, belonging to the Protein Kinase Superfamily. AKT1 is a major mediator of the responses to insulin, insulin-like growth factor 1 (IGF1), and glucose. AKT1 also plays a key role in the regulation of both muscle cell hypertrophy and atrophy. AKT1 activity is required for physiologic cardiac growth in response to IGF1 stimulation or exercise training. In contrast, AKT1 activity was found to antagonize pathologic cardiac growth that occurs in response to endothelin 1 stimulation or pressure overload. AKT1 selectively promotes physiological cardiac growth while AKT2 selectively promotes insulin-stimulated cardiac glucose metabolism. AKT1 deletion prevented tumor initiation as well as tumor progression, coincident with decreased Akt signaling in tumor tissues. AKT1 is the primary Akt isoform activated by mutant K-ras in lung tumors, and that AKT3 may oppose AKT1 in lung tumorigenesis and lung tumor progression. A number of separate studies have implicated AKT1 as an inhibitor of breast epithelial cell motility and invasion. AKT1 may have a dual role in tumorigenesis, acting not only pro-oncogenically by suppressing apoptosis but also anti-oncogenically by suppressing invasion and metastasis.

References

Hollander MC, et al. (2011) Akt1 deletion prevents lung tumorigenesis by mutant K-ras. *Oncogene*. 30(15): 1812-21.
Devaney JM, et al. (2011) AKT1 polymorphisms are associated with risk for metabolic syndrome. *Hum Genet*. 129(2): 129-39.
Dillon RL, et al. (2010) Distinct biological roles for the akt family in mammary tumor progression. *Cancer Res*. 70(11): 4260-4.
Toker A, et al. (2006) Akt signaling and cancer: surviving but not moving on. *Cancer Res*. 66(8): 3963-6.
Muslin AJ, et al. (2006) Role of Akt in cardiac growth and metabolism. *Novartis Found Symp*. 274: 118-26.

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/monoclonal/akt-recombinant-antibody-clone-0113-western-blot-immunohistochemistry-elisa/27779>