

Rabbit anti-Human Akt-T308 Monoclonal Antibody | anti-AKT1 antibody

Phospho-Akt-T308 Rabbit mAb

CATALOG # AAA283140	HOST Rabbit	REACTIVITY Human	APPLICATIONS ELISA, Immunohistochemistry, Western Blot
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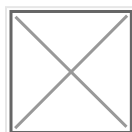
PRODUCT SYNONYMS

Akt-T308; Monoclonal Antibody; Phospho-Akt-T308 Rabbit mAb; AKT; PKB; RAC; PRKBA; PKB-ALPHA; RAC-ALPHA; Phospho-Akt-T308; anti-AKT1 antibody

PRODUCT SPECIFICATIONS

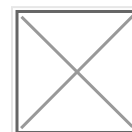
Host	Rabbit
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG
Purity/Purification	Affinity purification
Form/Format	PBS with 0.05% proclin300, 0.05% BSA, 50% glycerol, pH7.3.
Sequence	MKTFC
Applicable Applications for anti-AKT1 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Cross Reactivity	Human, Mouse, Rat
Immunogen	A synthetic phosphorylated peptide around T308 of human Phospho-Akt-T308 (NP_005154.2).
Modification	Phospho T308
Preparation and Storage	Store at -20 degree C. Avoid freeze/thaw cycles.

IMAGES



IHC (Immunohistochemistry)

Immunohistochemistry analysis of paraffin-embedded Human kidney using Phospho-Akt-T308 Rabbit mAb (AAA283140) at dilution of 1:60 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IHC staining.



WB (Western Blot)

Western blot analysis of lysates from Jurkat cells, using Phospho-Akt-T308 Rabbit mAb (AAA283140) at 1:2000 dilution. Jurkat cells were treated by Calyculin A (100 nM) at 37° for 30 minutes. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 10s.

ADDITIONAL INFORMATION

Related Product Information for anti-AKT1 antibody	<p>This gene encodes one of the three members of the human AKT serine-threonine protein kinase family which are often referred to as protein kinase B alpha, beta, and gamma. These highly similar AKT proteins all have an N-terminal pleckstrin homology domain, a serine/threonine-specific kinase domain and a C-terminal regulatory domain. These proteins are phosphorylated by phosphoinositide 3-kinase (PI3K). AKT/PI3K forms a key component of many signalling pathways that involve the binding of membrane-bound ligands such as receptor tyrosine kinases, G-protein coupled receptors, and integrin-linked kinase. These AKT proteins therefore regulate a wide variety of cellular functions including cell proliferation, survival, metabolism, and angiogenesis in both normal and malignant cells. AKT proteins are recruited to the cell membrane by phosphatidylinositol 3, 4, 5-trisphosphate (PIP3) after phosphorylation of phosphatidylinositol 4, 5-bisphosphate (PIP2) by PI3K. Subsequent phosphorylation of both threonine residue 308 and serine residue 473 is required for full activation of the AKT1 protein encoded by this gene. Phosphorylation of additional residues also occurs, for example, in response to insulin growth factor-1 and epidermal growth factor. Protein phosphatases act as negative regulators of AKT proteins by dephosphorylating AKT or PIP3. The PI3K/AKT signalling pathway is crucial for tumor cell survival. Survival factors can suppress apoptosis in a transcription-independent manner by activating AKT1 which then phosphorylates and inactivates components of the apoptotic machinery. AKT proteins also participate in the mammalian target of rapamycin (mTOR) signalling pathway which controls the assembly of the eukaryotic translation initiation factor 4F (eIF4E) complex and this pathway, in addition to responding to extracellular signals from growth factors and cytokines, is dysregulated in many cancers. Mutations in this gene are associated with multiple types of cancer and excessive tissue growth including Proteus syndrome and Cowden syndrome 6, and breast, colorectal, and ovarian cancers. Multiple alternatively spliced transcript variants have been found for this gene.</p>
Product Categories/Family for anti-AKT1 antibody	Epigenetics Nuclear Signaling ; Translation Control ; Regulation of eIF4 and p70 S6 Kinase ; Protein phosphorylation ; Cancer ; Signal Transduction ; G protein signaling ; Kinase ; Serine threonine kinases ; PI3K-Akt Signaling Pathway ; mTOR Signaling Pathway ; ErbB

NCBI AND UNIPROT INFORMATION

NCBI GI #	62241013
NCBI GeneID	207
NCBI Accession #	NP_001014431.1
NCBI GenBank Nucleotide #	NM_001014431.1
UniProt Accession #	P31749; Q9BWB6; B2RAM5
Molecular Weight	Calculated MW: 56kDa Observed MW: 65kDa
UniProt Protein Name	RAC-alpha serine/threonine-protein kinase
UniProt Gene Name	AKT1
UniProt Synonym Gene Names	PKB; RAC; PKB; PKB alpha
UniProt Entry Name	AKT1_HUMAN

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-t308-antibody-immunohistochemistry-western-blot-elisa/283140>