

Mouse AKT1 Monoclonal Antibody | anti-AKT1 antibody

AKT1 (Proto-Oncogene)

CATALOG # AAA62967	HOST Mouse	REACTIVITY Human. Others not known	APPLICATIONS Immunohistochemistry
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PRODUCT SYNONYMS

AKT1; Monoclonal Antibody; AKT1 (Proto-Oncogene); Oncogene AKT1; PKB; PKB-ALPHA; PRKBA; Protein Kinase B Alpha; Proto-oncogene c-Akt; RAC Alpha; RAC Serine/Threonine Protein Kinase; RAC-alpha serine/threonine-protein kinase; RAC-PK-alpha; anti-AKT1 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human. Others not known
Clonality	Monoclonal
Isotype	IgG2b, kappa
Clone Number	AKT1/2552
Specificity	Recognizes a protein of 62kDa, which is identified as AKT1. The serine/threonine kinase Akt family contains several members, including Akt1 (also designated PKB or RacPK), Akt2 (also designated PKB? or RacPK-?) and Akt 3 (also designated PKB? or thyoma viral proto-oncogene 3), which exhibit sequence homology with the protein kinase A and C families and are encoded by the c-Akt proto-oncogene. All members of the Akt family have a Pleckstrin homology domain. Akt1 and Akt2 are activated by PDGF stimulation. This activation is dependent on PDGFR-? tyrosine residues 740 and 751, which bind the subunit of the phosphatidylinositol 3-kinase (PI 3-kinase) complex. Activation of Akt1 by insulin or insulin-growth factor-1 (IGF-1) results in phosphorylation of both Thr 308 and Ser 473. Akt proteins become phosphorylated and activated in insulin/IGF-1-stimulated cells by an upstream kinase(s), and the activation of Akt1 and Akt2 is inhibited by the PI kinase inhibitor wortmannin.
Form/Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 1mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Sequence Length	480
Applicable Applications for anti-AKT1 antibody	IHC (Immunohistochemistry)
Immunogen	Recombinant human AKT1 protein fragment (around aa85-189)
Cellular Localization	Nuclear, Cytoplasmic and Cell Surface
Hu-chromosome Location	14q32.32
Positive Control	PDGF-treated NIH/3T3 cells. HeLa cell lysates. Human pancreas or cervical carcinoma.
Preparation and Storage	Antibody with azide - store at 2 to 8 degree C. Antibody without azide - store at -20 to -80 degree C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

IMAGES



Application Data

Analysis of Protein Array containing more than 19, 000 full-length human proteins using AKT1 Mouse Monoclonal Antibody (AKT1/2552).Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



IHC (Immunohistochemistry)

Formalin-fixed, paraffin-embedded human Pancreas stained with AKT1 Mouse Monoclonal Antibody (AKT1/2552).



SDS-PAGE

SDS-PAGE Analysis Purified AKT1 Mouse Monoclonal Antibody (AKT1/2552). Confirmation of Integrity and Purity of Antibody.

ADDITIONAL INFORMATION

References	Franke, T.F., et al. 1995. The protein kinase encoded by the Akt protoonco- gene is a target of the PDGF-activated phosphatidylinositol 3-kinase. Cell 81: 727-736.
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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; B7Z5R1
Molecular Weight	62kDa
NCBI Official Full Name	RAC-alpha serine/threonine-protein kinase
NCBI Official Synonym Full Names	AKT serine/threonine kinase 1
NCBI Official Symbol	AKT1
NCBI Official Synonym Symbols	AKT; PKB; RAC; CWS6; PRKBA; PKB-ALPHA; RAC-ALPHA
NCBI Protein Information	RAC-alpha serine/threonine-protein kinase
UniProt Protein Name	RAC-alpha serine/threonine-protein kinase
UniProt Gene Name	AKT1
UniProt Synonym Gene Names	PKB; RAC; PKB; PKB alpha

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