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Datasheet for 200-301-J36S

AKT3 Antibody

Overview

Description:	Anti-AKT3 (MOUSE) Monoclonal Antibody - 200-301-J36S
Item No.:	200-301-J36S
Size:	25 µL
Applications:	ELISA, IF, WB
Reactivity:	Human
Host Species:	Mouse

Product Details

Background:	AKT3 Antibody detects AKT3 which is a component of the PI-3 kinase pathway and is activated by phosphorylation at Ser 473 and Thr 308. AKT is a cytoplasmic protein also known as Protein Kinase B (PKB) and rac (related to A and C kinases). AKT is a key regulator of many signal transduction pathways. AKT Exhibits tight control over cell proliferation and cell viability. Overexpression or inappropriate activation of AKT is noted in many types of cancer. AKT mediates many of the downstream events of PI 3-kinase (a lipid kinase activated by growth factors, cytokines and insulin). PI 3-kinase recruits AKT to the membrane, where it is activated by PDK1 phosphorylation. Once phosphorylated, AKT dissociates from the membrane and phosphorylates targets in the cytoplasm and the cell nucleus. AKT has two main roles: (i) inhibition of apoptosis; (ii) promotion of proliferation. Anti-AKT3 Antibody is ideal for investigators involved in Cell Signaling, Neuroscience and Signal Transduction research.
Synonyms:	Mouse anti-AKT3 antibody, AKT-3, PKB antibody, PKB gamma antibody, PKBGAMMA antibody, PRKBG antibody, Protein kinase Akt 3 antibody, Protein kinase B gamma antibody, RAC-gamma serine/threonine-protein kinase, RAC-PK-gamma
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	9A5.H9.G7
Format:	IgG1

Target Details

Gene Name:	AKT3

Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-AKT3 Antibody was produced in mice by repeated immunizations with a synthetic peptide corresponding to internal residues of human AKT3 protein.
Purity/Specificity:	Anti-AKT3 antibody is directed against human AKT3. The antibody detects both unphosphorylated and phosphorylated forms of the protein. Anti-AKT3 antibody was purified from ascites by Protein A chromatography. Cross reactivity with AKT3 from other species has not been determined, however, the sequence of the immunogen shows 100% identity to human, mouse, and rat, therefore, cross reactivity is expected. Cross-reactivity with AKT2 and AKT has not been determined.
Relevant Links:	• GeneID - 10000 • UniProtKB - Q9Y243 • NCBI - NP_001193658.1

Application Details

Tested Applications:	ELISA, IF, WB
Application Note:	Anti-AKT3 Antibody is tested in ELISA, IF, and western blotting. This antibody is suitable in immunohistochemistry and flow cytometry. Expect a band approximately 56 kDa in size corresponding to AKT3 protein by western blotting in the appropriate cell lysate or extract. This monoclonal antibody reacts with human AKT. Specific conditions for reactivity should be optimized by the end user. For immunohistochemistry we recommend the use of fresh frozen tissues. Attempts at staining paraffin-embedded formalin fixed tissues were negative. No pre-treatment of sample is required.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:2,000 - 1:10,000
FC:	User Optimized
IF:	User Optimized
IHC:	20 µg/mL
WB:	1:500-1:2000

Formulation

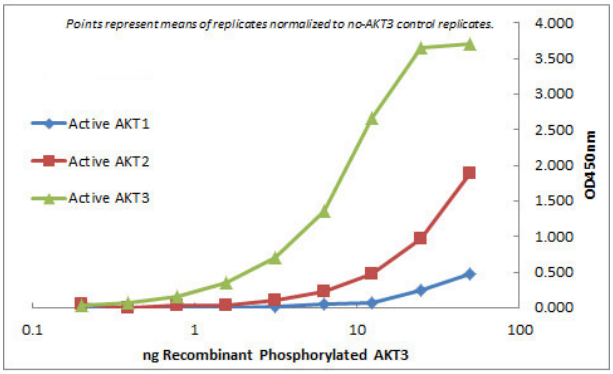
Physical State:	Liquid (sterile filtered)
Concentration:	1mg/mL by UV absorbance at 280 nm

Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

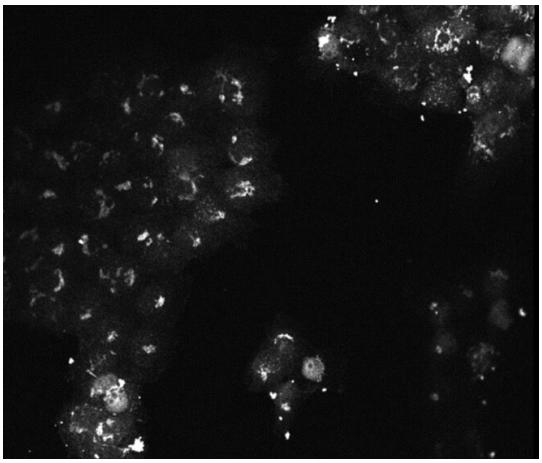
Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Expiration:	Expiration date is one (1) year from date of receipt.

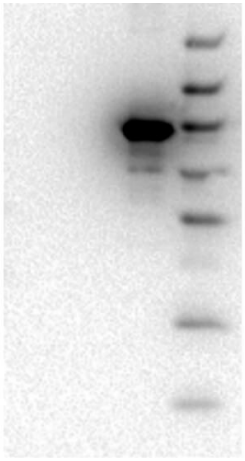
Images



ELISA
ELISA of Mouse Monoclonal anti-AKT3 antibody. Antigen: GST AKT1, GST AKT2, GST AKT3. Coating amount: starting from 50 ng/well. Primary antibody: Mouse monoclonal anti-AKT3 antibody at 100ng/well. Dilution series: 2-fold. Mid-point concentration: 3 ng/mL Mouse monoclonal anti-AKT3 antibody. Secondary antibody: Peroxidase mouse secondary antibody at 1:10,000. Substrate: TMB (p/n TMBE-0100).



Immunofluorescence Microscopy
Immunofluorescence of Mouse monoclonal anti-AKT3 antibody. Cell Type: A431 cells. Fixation: 4% paraformaldehyde 10 min. Permeabilization: 0.5% Triton X 30 min. Primary Ab: (p/n 200-301-J36) at 1:250 for 72 hours 4°C. Secondary Ab: (p/n 610-142-121) at 1:1000 overnight 4°C.



Western Blot
Western Blot of Mouse monoclonal anti-AKT3 antibody. Lane 1: GST-AKT1. Lane 2: GST-AKT2. Lane 3: GST-AKT3. Lane 4: Molecular Weight Markers. Load: 50 ng per lane. Primary antibody: anti-AKT3 antibody at 1:1000 for overnight at 4°C. Secondary antibody: Rabbit secondary antibody anti mouse at 1:40,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 85 kDa for GST-AKT3.

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