Datasheet for ABIN1043753

anti-AKT1 antibody (pThr308) (Biotin)

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Overview

Quantity:	50 µg
Target:	AKT1
Binding Specificity:	pThr308
Reactivity:	Human, Mouse, Rat, Monkey
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This AKT1 antibody is conjugated to Biotin
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Flow Cytometry (FACS), Immunoprecipitation (IP), Dot Blot (DB)

Product Details

Purpose:	AKT phospho T308 Antibody Biotin Conjugated
Immunogen:	Immunogen: Anti-AKT pT308 monoclonal antibody was produced by repeated immunizations with a synthetic peptide corresponding to residues surrounding T308 of human AKT1 protein. Immunogen Type: Conjugated Peptide
Clone:	18F3-H11
Isotype:	IgG1 kappa
Cross-Reactivity (Details):	This antibody is specific for human and mouse AKT protein phosphorylated at T308.
Characteristics:	Synonyms: mouse anti-AKT pT308 Biotin conjugated Antibody, Biotin conjugated mouse anti-AKT pT308 Antibody, RAC-PK-alpha, Protein kinase B, PKB, C-AKT, RAC-alpha serine/threonine-protein kinase, Proto-oncogene c-Akt, AKT1, AKT 1, AKT-1, Akt phospho T308 Antibody, Anti-

Product Details

	AKT pT308 Monoclonal Antibody Biotin Conjugated
Purification:	Anti-AKT pT308 was purified from concentrated tissue culture supernate by Protein A chromatography.
Labeling Ratio:	10-20

Target Details

Target:	AKT1
Alternative Name:	AKT1 (AKT1 Products)
Background:	Background: Anti-AKT phospho T308 is ideal for western blotting, ELISA, IHC and IP. Phospho AKT pT308 antibody is specific for AKT protein phosphorylated at T308. AKT is a component of the PI-3 kinase pathway and is activated by phosphorylation at Ser 473 and Thr 308. Anti-AKT pT308 monoclonal antibody is ideal for investigators involved in Cancer, Cell Signaling, Neuroscience, Signal Transduction research.
Gene ID:	207, 62241011
UniProt:	P31749
Pathways:	PI3K-Akt Signaling, RTK Signaling, TCR Signaling, AMPK Signaling, Interferon-gamma Pathway, TLR Signaling, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Response to Water Deprivation, Regulation of Actin Filament Polymerization , Carbohydrate Homeostasis, Glycosaminoglycan Metabolic Process, Cellular Glucan Metabolic Process, Regulation of Muscle Cell Differentiation, Cell-Cell Junction Organization, Regulation of Cell Size, Skeletal Muscle Fiber Development, Regulation of Carbohydrate Metabolic Process, Hepatitis C, Protein targeting to Nucleus, CXCR4-mediated Signaling Events, Signaling Events mediated by VEGFR1 and VEGFR2, Negative Regulation of intrinsic apoptotic Signaling, Thromboxane A2 Receptor Signaling, Signaling of Hepatocyte Growth Factor Receptor, Positive Regulation of fat Cell Differentiation, VEGFR1 Specific Signals, VEGF Signaling, Warburg Effect

Application Details

Application Notes:	Flow Cytometry Dilution: User Optimized Immunohistochemistry Dilution: 20 µg/mL Application Note: Biotin Conjugated Anti-AKT pT308 is tested for ELISA, immunohistochemistry, immunoprecipitation and western blotting. Expect a band approximately 56 kDa in size corresponding to phosphorylated AKT protein by western blotting in the appropriate cell lysate

Application Details

	or extract. This phospho-specific monoclonal antibody reacts with human and mouse AKT pT308 and shows minimal reactivity by ELISA against the non-phosphorylated form of the immunizing peptide. Specific conditions for reactivity should be optimized by the end user. Use formalin-fixed paraffin-embedded sections for immunohistochemistry. No pre-treatment of sample is required. Western Blot Dilution: 1:500 - 1:3,000 Immunoprecipitation Dilution: User Optimized ELISA Dilution: 1:20,000 Other: User Optimized
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Reconstitution Volume: 50µL Reconstitution Buffer: Restore with deionized water (or equivalent)
Concentration:	1.0 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiry Date:	12 months

Publications

Product cited in:	Lawlor, Alessi: "PKB/Akt: a key mediator of cell proliferation, survival and insulin responses?" in: **Journal of cell science**, Vol. 114, Issue Pt 16, pp. 2903-10, (2001) (PubMed).

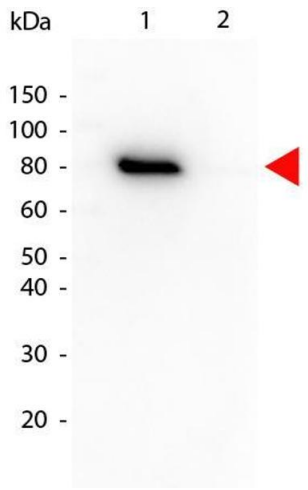
Publications

Alessi: "Discovery of PDK1, one of the missing links in insulin signal transduction. Colworth Medal Lecture." in: **Biochemical Society transactions**, Vol. 29, Issue Pt 2, pp. 1-14, (2001) (PubMed).

Jones, Jakubowicz, Pitossi, Maurer, Hemmings: "Molecular cloning and identification of a serine/threonine protein kinase of the second-messenger subfamily." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 88, Issue 10, pp. 4171-5, (1991) (PubMed).

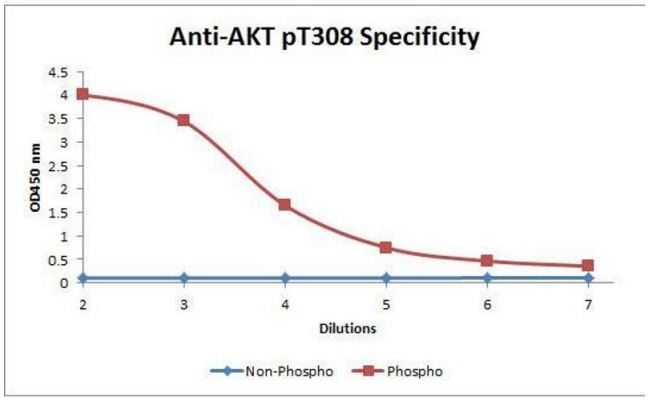
Staal: "Molecular cloning of the akt oncogene and its human homologues AKT1 and AKT2: amplification of AKT1 in a primary human gastric adenocarcinoma." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 84, Issue 14, pp. 5034-7, (1987) (PubMed).

Images



Western Blotting

Image 1. Western Blot of Mouse anti-Akt phospho T308 Biotin Conjugated antibody. Lane 1: GST tagged AKT1 active recombinant protein. Lane 2: GST tagged AKT1 un-active recombinant protein. Load: 25 ng per lane. Primary antibody: Akt phospho T308 Biotin Conjugated antibody at 1:1,000 for overnight at 4°C. Secondary antibody: HRP Streptavidin secondary antibody at 1:40,000 for 30 min at RT. Block: ABIN925618 for 30 min at RT. Predicted/Observed size: 79 kDa, 79 kDa for Akt phospho T308. Other band(s): none



ELISA

Image 2. ELISA of Mouse anti-Akt phospho T308 Biotin Conjugated antibody. Antigen: Unconjugated Akt phospho T308 and AKT non-phospho T308. Coating amount: 0.1 µg per well. Primary antibody: Akt phospho T308 Biotin Conjugated antibody at 5 µg/mL. Dilution series: 3-fold. Mid-point concentration: 5 ng/mL Akt phospho T308 Biotin Conjugated antibody. Secondary antibody: Peroxidase streptavidin secondary antibody at 1:10,000. Substrate: TMB