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Datasheet for ABIN6939337
anti-AKT1 antibody (AA 85-189)

5 Images

Overview

Quantity:	100 µg
Target:	AKT1
Binding Specificity:	AA 85-189
Reactivity:	Human, Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This AKT1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Staining Methods (StM)

Product Details

Immunogen:	Recombinant fragment of human AKT1 protein (around aa 85-189) (exact sequence is proprietary)
Clone:	AKT1-2784
Isotype:	IgG
Specificity:	Recognizes a protein of 62 kDa, 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 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.

Product Details

Purification: Purified by Protein A/G

Target Details

Target: AKT1

Alternative Name: AKT1 ([AKT1 Products](#))

Molecular Weight: 62kDa

Gene ID: 207

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: Positive Control: PDGF-treated NIH/3T3 cells. HeLa cell lysates. Human pancreas or cervical carcinoma.

Known Application: Western Blot (1-2 µg/mL), Immunohistochemistry (Formalin-fixed) (1-2 µg/mL for 30 min at RT)(Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes)Optimal dilution for a specific application should be determined.

Restrictions: For Research Use only

Handling

Concentration: 200 µg/mL

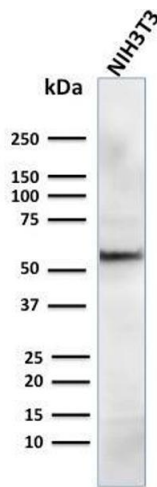
Buffer: 10 mM PBS with 0.05 % BSA & 0.05 % azide.

Preservative: Sodium azide

Handling

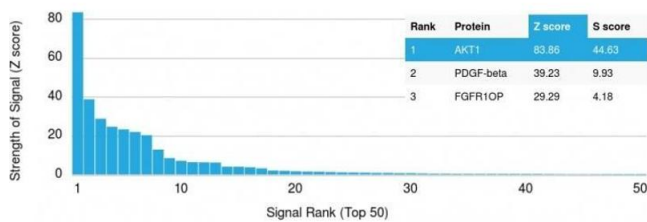
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C, -80 °C
Storage Comment:	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.
Expiry Date:	24 months

Images



Western Blotting

Image 1. Western Blot Analysis of human NIH3T3 cell lysate using AKT1 Mouse Monoclonal Antibody (AKT1/2784).

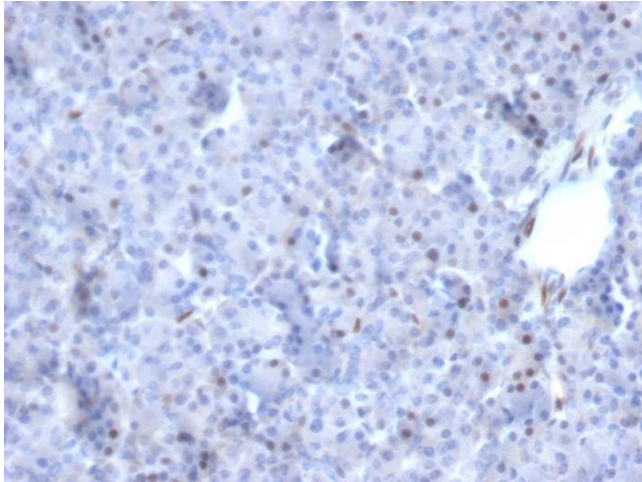


Protein Array

Image 2. Analysis of Protein Array containing more than 19,000 full-length human proteins using AKT1 Mouse Monoclonal Antibody (AKT1/2784).

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.



Immunohistochemistry

Image 3. Formalin-fixed, paraffin-embedded human Pancreas stained with AKT1 Mouse Monoclonal Antibody (AKT1/2784).

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN6939337.