

Datasheet for ABIN5624567

**AKT1 Protein****3** Images[Go to Product page](#)

## Overview

Quantity:	10 µg
Target:	AKT1
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Application:	Western Blotting (WB)

## Product Details

**Purification:** Recombinant protein corresponds to amino acids 1 to 480 of mature human AKT1, Akt isoform 1. The recombinant protein contains a polyhistidine affinity tag at the amino terminus. This protein was co-expressed with the p110 kinase domain leading to phosphorylation of key residues T308 and S473. Purity is greater than 90% as determined by reducing and non-reducing SDS-PAGE and by analytical HPLC.

## Target Details

Target:	AKT1
Alternative Name:	AKT1 Protein ( <a href="#">AKT1 Products</a> )
Gene ID:	207
UniProt:	<a href="#">P31749</a>
Pathways:	<a href="#">PI3K-Akt Signaling</a> , <a href="#">RTK Signaling</a> , <a href="#">TCR Signaling</a> , <a href="#">AMPK Signaling</a> , <a href="#">Interferon-gamma Pathway</a> , <a href="#">TLR Signaling</a> , <a href="#">Fc-epsilon Receptor Signaling Pathway</a> , <a href="#">EGFR Signaling Pathway</a> , <a href="#">Neurotrophin</a>

## Target Details

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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

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Application Notes: Application Note: AKT1 is suitable as a control for polyclonal or monoclonal anti-AKT1 in immunological assays. Akt1 recombinant protein is expected to be phosphorylated and in an active state. It is well suited as a control for anti-AKT pT308 which detects phosphorylated T308 residue, and anti-AKT pS473, that detects phosphorylated S473. For western blot use at 50 ng or less. For other assays concentration is user optimized.

Western Blot Dilution: 50 ng

Restrictions: For Research Use only

## Handling

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Format: Liquid

Concentration: 1.16 mg/mL

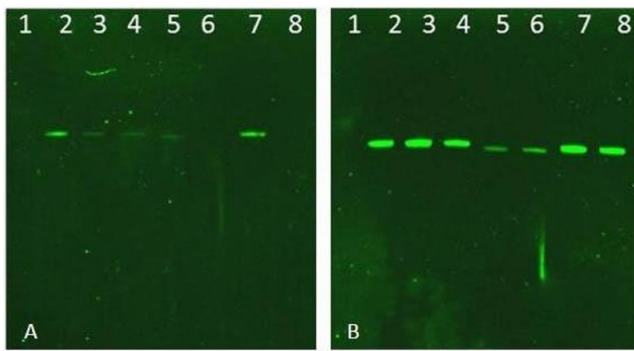
Buffer: Buffer: 20 mM Tris pH 8, 300 mM NaCl with 10 % glycerol  
Stabilizer: 10 % (v/v) Glycerol

Preservative: Without preservative

Storage: -20 °C

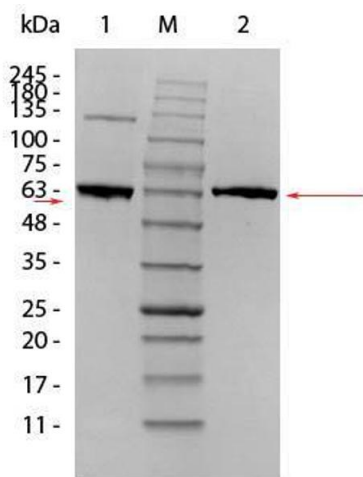
Storage Comment: Store vial at -70° C prior to use. Thaw only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. For long term storage we recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL) . For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.

Expiry Date: 12 months



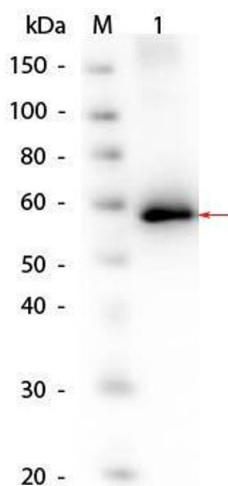
### Western Blotting

**Image 1.** Western Blot of Rabbit AKT Antibodies. Lane 1: NIR MW protein ladder. Lane 2: AKT1, recombinant: . Lane 3: AKT1, phosphatase-treated: 009-001-I51. Lane 4: AKT1, mutant T308A/S473A: 009-001-P22. Lane 5: AKT2, recombinant: 009-001-P23. Lane 6: AKT2, phosphatase-treated: 009-001-E71. Lane 7: AKT3, recombinant: 009-001-P24. Lane 8: AKT3, phosphatase-treated: 009-001-E75. Load: 50ng per lane. Blot A: 600-401-269 Anti-Akt pT308 used at 1:2270, Blot B: 100-401-401 Anti-Akt used 1:1000.



### SDS-PAGE

**Image 2.** SDS-PAGE of AKT1 Human Recombinant Protein. Lane 1: AKT1, unreduced. Lane 2: prestained MW markers. Lane 3: AKT1, reduced. Load: 1 µg per lane. Predicted/Observed size: 56 kDa, ~56 kDa for AKT1. Other band(s): none.



### Western Blotting

**Image 3.** Western Blot of AKT1 Human Recombinant Protein. Lane 1: SuperSignal MW markers. Lane2: AKT1. Load: 50 ng per lane. Primary antibody: AKT1 antibody at 1:1,000 for 1 hour at room temperature. Secondary antibody: Peroxidase mouse secondary antibody at 1:20,000 for 1 hour at room temperature. Block: Blocking Buffer for Fluorescent Western Blotting (ABIN925618), 1 hour at room temperature. Predicted/Observed size: 56kDa, 56kDa for AKT1. Other band(s): none.