

Datasheet for ABIN6656082  
**anti-AKT1 antibody (pThr308) (DyLight 549)**



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2 Images

## Overview

Quantity:	100 µg
Target:	AKT1
Binding Specificity:	pThr308
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This AKT1 antibody is conjugated to DyLight 549
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Flow Cytometry (FACS), Fluorescence Microscopy (FM), FLISA

## Product Details

Purpose:	AKT phospho T308 Dylight 549 Conjugated Antibody
Immunogen:	This monoclonal antibody was produced by repeated immunizations with a synthetic peptide corresponding to residues surrounding T308 of human AKT1 protein.
Clone:	18F3-H11
Isotype:	IgG1 kappa
Cross-Reactivity (Details):	This antibody is specific for human and mouse AKT protein phosphorylated at T308.
Purification:	This product was purified from concentrated tissue culture supernate by Protein A chromatography.
Labeling Ratio:	4.0

## Target Details

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Target:	AKT1
Alternative Name:	Akt ( <a href="#">AKT1 Products</a> )
Background:	<p>Synonyms: mouse anti-AKT pT308 DyLight™ 549 conjugated Antibody, DyLight™ 549 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</p> <p>Background: AKT 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 AKT1, 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.</p> <p>Gene Name: AKT1</p>
Gene ID:	207,62241011
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 Signaling Pathway</a> , <a href="#">Response to Water Deprivation</a> , <a href="#">Regulation of Actin Filament Polymerization</a> , <a href="#">Carbohydrate Homeostasis</a> , <a href="#">Glycosaminoglycan Metabolic Process</a> , <a href="#">Cellular Glucan Metabolic Process</a> , <a href="#">Regulation of Muscle Cell Differentiation</a> , <a href="#">Cell-Cell Junction Organization</a> , <a href="#">Regulation of Cell Size</a> , <a href="#">Skeletal Muscle Fiber Development</a> , <a href="#">Regulation of Carbohydrate Metabolic Process</a> , <a href="#">Hepatitis C</a> , <a href="#">Protein targeting to Nucleus</a> , <a href="#">CXCR4-mediated Signaling Events</a> , <a href="#">Signaling Events mediated by VEGFR1 and VEGFR2</a> , <a href="#">Negative Regulation of intrinsic apoptotic Signaling</a> , <a href="#">Thromboxane A2 Receptor Signaling</a> , <a href="#">Signaling of Hepatocyte Growth Factor Receptor</a> , <a href="#">Positive Regulation of fat Cell Differentiation</a> , <a href="#">VEGFR1 Specific Signals</a> , <a href="#">VEGF Signaling</a> , <a href="#">Warburg Effect</a>

## Application Details

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Application Notes:	FLISA_Dilution: >1:20,000 ELISA_Dilution: 1:4,000 - 1:20,000 Immunohistochemistry_Dilution: 20 µg/mL
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## Application Details

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Flow\_Cytometry\_Dilution: User Optimized

IF\_Microscopy\_Dilution: >1:5,000

Western\_Blot\_Dilution: >1:10,000

Other: User Optimized

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**Comment:** This monoclonal antibody is tested in western blotting. This antibody is suitable for immunofluorescence microscopy, IHC, FLISA, and flow cytometry. Expect a band approximately 56 kDa in size corresponding to phosphorylated AKT protein by western blotting in the appropriate cell lysate 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.

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**Restrictions:** For Research Use only

## Handling

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**Format:** Lyophilized

**Reconstitution:** Reconstitution\_Buffer: Restore with deionized water (or equivalent)

Reconstitution\_Volume: 100 µL

**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

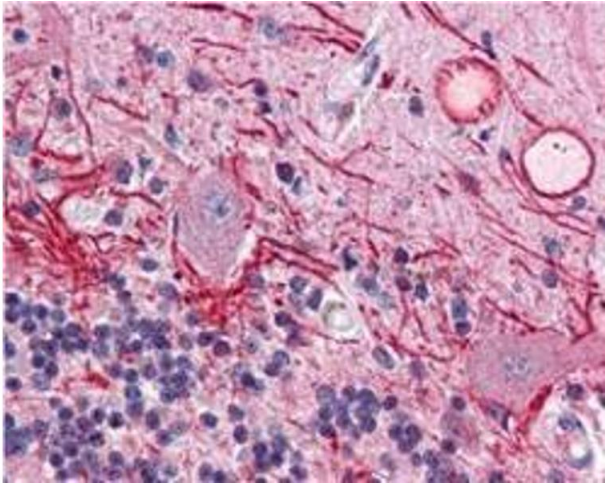
**Preservative:** Sodium azide

**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

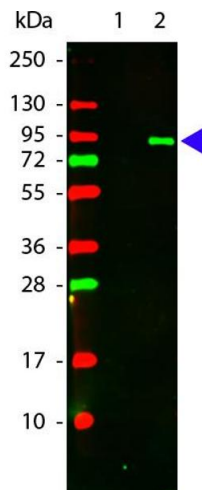
**Storage Comment:** Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

**Expiry Date:** 12 months



### Immunohistochemistry

**Image 1.** Immunohistochemistry of Mouse anti-AKT pT308 antibody. Tissue: human brain cerebellum tissue (40X). Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: AKT pT308 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: staining of Purkinje neurons and cell processes in the cerebellum, cytosolic as well as occasionally nuclear. Staining: AKT pT308 as precipitated red signal with hematoxylin purple nuclear counterstain.



### Western Blotting

**Image 2.** Anti-AKT pT308 Monoclonal Antibody DL549 Conjugated - Western Blot. Western Blot of Mouse anti-AKT pT308 antibody DyLight 549 Conjugated. Lane 1: GST-AKT1 Unactive recombinant protein. Lane 2: GST-AKT1 Active recombinant protein. Load: 50 ng per lane. Primary antibody: None. Secondary antibody: DyLight 549 conjugated Ms-a-AKT pT308 was used at a 1:1,000 dilution for 1 h at RT. Block: 3% BSA in TBS for 30 min at RT. Predicted/Observed size: (indicated by arrowhead at ~79 kDa). Other band(s): None.