

# AKT [pT308] Rabbit Recombinant Oligoclonal Antibody - Purified

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Catalog Number: 710122 Store at 2–8°C

Clonality:OligoclonalHost/Class:Rabbit IgGConcentration:0.5 mg/mLReactivity:Human AKTQuantity: $100 \mu g$ Predicted Reactivity:HumanVolume: $200 \mu L$ 

# **Product Description**

AKT is a serine/threonine kinase which plays a role in regulating cell survival, cell proliferation, differentiation, glucose metabolism, and protein synthesis. AKT is activated by cytokines and growth factors in a PI-3 kinase-dependent manner, involving phospholipid binding, and phosphorylation of the activation loop at Threonine 308 by PDK1.

# **Product Specifications**

Immunogen: Phosphopeptide corresponding to

amino acids 304–312 of human AKT

Alternate Names: PKB (protein kinase B), Akt1 kinase,

v-akt murine thymoma viral oncogene

homolog 1

Apparent MW: ~56 kDa

Gene ID: 11651

Protein Accession No.: P31749

Sequence Identity: Human

Clone/PAD: B18HCLC

Lot: See product label

# **Product Applications**

Application	Species	Test Material	Concentration
Western blotting	Human	U87-MG cells	0.1–2 μg/mL
Immunocyto chemistry	Human	HeLa cells	1–3 μg/mL
Indirect ELISA	Human	Phosphopeptide	$1.5 \times 10^{-4} \text{ to}$ 3 µg/mL

### Storage and Handling

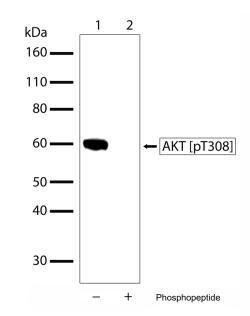
Store the antibody at 2–8°C for up to 1 month, or –20°C for long storage. Avoid repeated freezing and thawing.

# Stability

Expires one year from date of receipt when stored as instructed.

#### Storage Buffer

Phosphate buffered saline (PBS) with 0.09% sodium azide.



**Figure 1** Western blot analysis of AKT [pT308] Rabbit Recombinant Oligoclonal Antibody (Cat. no. 710122). Western blot analysis was performed on whole cell extracts of U87-MG (lane 1 and 2). A band corresponding to phosphorylated AKT at  $\sim$ 60 kDa was detected using AKT [pT308] Rabbit Recombinant Oligoclonal Antibody at a concentration of 1  $\mu$ g/mL (lane 1). To confirm specificity, competition was performed with the phosphopeptide (lane 2).

### Safety Data Sheets (SDS)

Safety Data Sheets (SDSs) are available at www.invitrogen.com/sds.

# Certificate of Analysis

The Certificate of Analysis provides detailed quality control and product qualification information for each product. Certificates of Analysis are available on our website. Go to <a href="https://www.invitrogen.com/support">www.invitrogen.com/support</a> and search for the Certificate of Analysis by product lot number, which is printed on the box.

### **Related Products**

Product Name	Quantity	Catalog No.
iBlot® Dry Blotting System	1 unit	IB1001
WesternBreeze <sup>™</sup> Chromogenic Kit Anti-Rabbit	1 kit	WB7105
WesternBreeze <sup>™</sup> Chemiluminescent Kit, Anti-Rabbit	1 kit	WB7106
Goat anti-mouse (H+L), HRP conj.	1 mg	G21040
Goat anti-rabbit (H+L), HRP conj.	1 mg	G21234
Goat anti-mouse (H+L), AP conj.	1 mg	G21060
Goat anti-rabbit (H+L), AP conj.	1 mg	G21079
Nitrocellulose, 0.2 μm	20/pack	LC2000

Explanation of symbols					
Symbol	Description	Symbol	Description		
REF	Catalogue Number	LOT	Batch code		
RUO	Research Use Only	IVD	In vitro diagnostic medical device		
	Use by	ľ	Temperature limitation		
***	Manufacturer	EC REP	European Community authorised representative		
[-]	Without, does not contain	[+]	With, contains		
from Light	Protect from light	<u> </u>	Consult accompanying documents		
$\prod_i$	Directs the user to consult instructions for use (IFU), accompanying the product.				

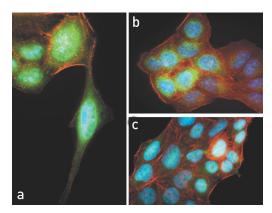
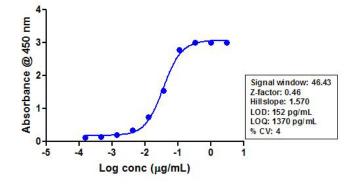


Figure 2 Immunocytochemistry analysis of AKT [pT308] Rabbit Recombinant Oligoclonal Antibody (Cat. no. 710122). Immunocytochemistry analysis of HeLa cells stained with AKT [pT308] Rabbit Recombinant Oligoclonal Antibody with Alexa Fluor® 488 goat anti-rabbit as a secondary antibody (green). DAPI was used to stain the nucleus, and Alexa Fluor® 594 phalloidin was used to stain actin (red). a and b: composite image of cells showing nuclear localization of phosphorylated AKT. c: image showing results of competition assay using phospho AKT [pT308] peptide.



**Figure 3** Indirect ELISA of AKT [pT308] Rabbit Recombinant Oligoclonal Antibody (Cat. no. 710122). Indirect ELISA was performed using various dilutions of AKT [pT308] Rabbit Recombinant Oligoclonal Antibody (Cat. no. 710122) to detect phospho AKT [pT308] peptide coated onto the plate. A nonlinear regression analysis was performed (4 PL) and LOD and LOQ for the antibody was determined.

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