# abcam

### **Product datasheet**

## Anti-AKT (phospho T308) antibody ab38449

★★★★★★ 5 Abreviews 669 References 3 图像

概述			
产品名称	Anti-AKT (phospho T308)抗体		
描述	兔多克隆抗体to AKT (phospho T308)		
宿主	Rabbit		
特异性	This antibody was made against a peptide directed against the phosphorylated form of AKT1 at T308, but due to a high degree of homology it is predicted to cross react with AKT2 and AKT3 it they are phosphorylated at the corresponding residue.		
经测试应 <b>用</b>	适用于: WB, IHC-P		
<b>种属反</b> 应性	<b>与反</b> 应: Mouse, Rat, Human		
免疫原	Synthetic peptide corresponding to Human AKT aa 250-350 (phospho T308). Database link: <b>P31749</b>		
<b>常</b> 规说 <b>明</b>	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.		
	If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As		
性能			
形式	Liquid		

<b>存放</b> 说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	рН: 7.40
	Preservative: 0.02% Sodium azide
	Constituents: 0.87% Sodium chloride, 50% Glycerol, PBS
纯 <b>度</b>	Immunogen affinity purified
克隆	多克隆
同种型	lgG

#### The Abpromise guarantee

#### Abpromise™承诺保证使用ab38449于以下的经测试应用

#### "应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★★★☆☆☆ <u>(3)</u>	<ul><li>1/500 - 1/1000. Predicted molecular weight: 56 kDa.</li><li>Block in 5% non-fat milk in TBST, RT, 90min.</li><li>In order to detect a clear signal, treatment is required when using this antibody.</li></ul>
IHC-P	<b>★★★</b> ☆☆☆ <u>(1)</u>	Use at an assay dependent concentration.

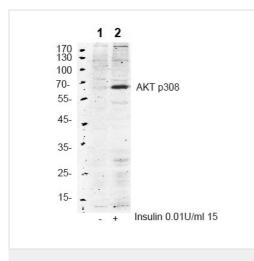
#### 靶标

#### 相关性

AKT, also known as protein kinase B (PKB), is a serine/threonine protein kinase. There are three mammalian isoforms of AKT: AKT1 (PKB alpha), AKT2 (PKB beta) and AKT3 (PKB gamma) with AKT2 and AKT3 being approximately 82% identical with the AKT1 isoform. Each isoform has a pleckstrin homology (PH) domain, a kinase domain and a carboxy terminal regulatory domain. AKT was originally cloned from the retrovirus AKT8, and is a key regulator of many signal transduction pathways. Its tight control over cell proliferation and cell viability are manifold; overexpression or inappropriate activation of AKT has been seen in many types of cancer. AKT mediates many of the downstream events of phosphatidylinositol 3 kinase (a lipid kinase activated by growth factors, cytokines and insulin). PI3 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. AKT has been shown to play a role in such metabolic processes as glucose transport, glycogen synthesis, glycolysis, and protein synthesis. It had also been shown to promote cell survival by inhibiting apoptosis through its ability to phosphoylate and inactivate several targets, including Bad, Forkhead transcription factors, and caspase 9. Activity of AKT has been associated with the phosphorylation of two sites: T308, in the activation loop of the kinase, and S473, at the carboxyl terminus. Phosphorylation of both sites contributes to AKT activity, however phosphorylation of T308 has been shown to be absolutely essential for AKT activation.

Cell Membrane, Cytoplasmic and Nuclear. Note=Nucleus after activation by integrin-linked protein kinase 1 (ILK1).

细胞定位



Western blot - Anti-AKT (phospho T308) antibody (ab38449) **All lanes :** Anti-AKT (phospho T308) antibody (ab38449) at 1/1000 dilution

Lane 1 : HeLa cells Lane 2 : HeLa cells treated with 0.01 U/mL Insulin for 15 minutes

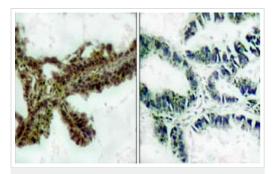
Lysates/proteins at 20 µg per lane.

Secondary All lanes : Goat Anti-Rabbit IgG (H+L) HRP at 1/10000 dilution

Predicted band size: 56 kDa

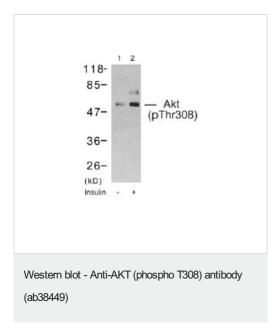
#### 10% gel.

Running conditions: 60v, 30min; 120v 60min Transfer conditions: 150mA 120min Nitrocellulose membrane. Blocking conditions: 5% non-fat milk in TBST, RT, 90min. Primary antibody incubation: 4?, overnight Secondary antibody incubation: room temperature for 45 minutes Washing condition: 5 ml TBST, 4 x 5min



Immunohistochemical analysis of AKT (phospho T308) expression in paraffin embedded human lung carcinoma tissue, using ab38449 (1/50). Right-hand panel represents a negative control where ab38449 was pre-incubated with the immunizing (blocking) peptide.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-AKT (phospho T308) antibody (ab38449)



**All lanes :** Anti-AKT (phospho T308) antibody (ab38449) at 1/500 dilution

Lane 1 : 293 cell lysate - untreated Lane 2 : 293 cell lysate - treated with insulin

Lysates/proteins at 30 µg per lane.

Predicted band size: 56 kDa Observed band size: 56 kDa

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