



## Product datasheet

### Anti-AKT1 + AKT2 + AKT3 antibody ab126811

★★★★★ [2 Abreviews](#) [39 References](#) [3 Images](#)

#### Overview

<b>Product name</b>	Anti-AKT1 + AKT2 + AKT3 antibody
<b>Description</b>	Rabbit polyclonal to AKT1 + AKT2 + AKT3
<b>Host species</b>	Rabbit
<b>Specificity</b>	Recognizes AKT1, AKT2, and AKT3 proteins
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Synthetic peptide corresponding to Human AKT1 + AKT2 + AKT3 aa 313-317. Sequence: PEYLA <div>  <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a> </div>
<b>Positive control</b>	3T6 cell lysate and recombinant Human AKT1, AKT2, and AKT3
<b>General notes</b>	<p>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.</p> <p>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&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine)
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab126811 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (1)	1/1000. Predicted molecular weight: 56 kDa.

## Target

### Function

IGF-1 leads to the activation of AKT3, which may play a role in regulating cell survival. Capable of phosphorylating several known proteins. Truncated isoform 2/PKB gamma 1 without the second serine phosphorylation site could still be stimulated but to a lesser extent.

### Tissue specificity

In adult tissues, it is highly expressed in brain, lung and kidney, but weakly in heart, testis and liver. In fetal tissues, it is highly expressed in heart, liver and brain and not at all in kidney.

### Sequence similarities

Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. RAC subfamily. Contains 1 AGC-kinase C-terminal domain. Contains 1 PH domain. Contains 1 protein kinase domain.

### Domain

Binding of the PH domain to the phosphatidylinositol 3-kinase alpha (PI(3)K) results in its targeting to the plasma membrane.

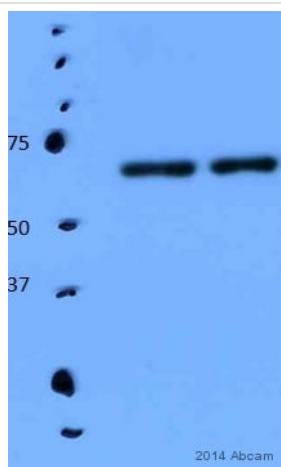
### Post-translational modifications

Phosphorylation on Thr-305 and Ser-472 is required for full activity (By similarity). Phosphorylated upon DNA damage, probably by ATM or ATR. Ubiquitinated. When fully phosphorylated and translocated into the nucleus, undergoes 'Lys-48'-polyubiquitination catalyzed by TTC3, leading to its degradation by the proteasome.

### Cellular localization

Cytoplasm. Membrane. Membrane-associated after cell stimulation leading to its translocation.

## Images



Western blot - Anti-AKT1 + AKT2 + AKT3 antibody (ab126811)

This image is courtesy of an anonymous Abreview

**All lanes** : Anti-AKT1 + AKT2 + AKT3 antibody (ab126811) at 1/5000 dilution

**All lanes** : Rat vascular smooth muscle cell lysate

Lysates/proteins at 100000 cells per lane.

### Secondary

**All lanes** : HRP-conjugated donkey anti-rabbit IgG polyclonal at 1/2000 dilution

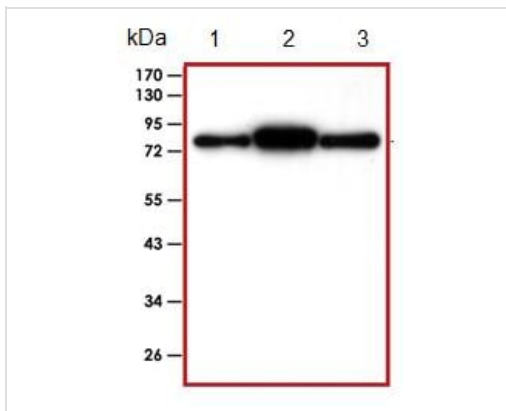
Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 56 kDa

**Observed band size:** 60 kDa

**Exposure time:** 10 seconds



Western blot - Anti-AKT1 + AKT2 + AKT3 antibody (ab126811)

**All lanes :** Anti-AKT1 + AKT2 + AKT3 antibody (ab126811) at 1/1000 dilution

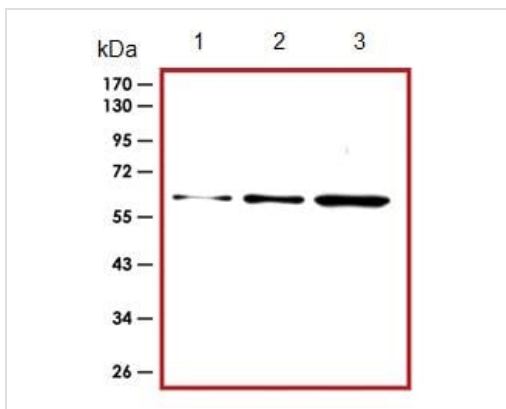
**Lane 1 :** Recombinant Human AKT1

**Lane 2 :** Recombinant Human AKT2

**Lane 3 :** Recombinant Human AKT3

Lysates/proteins at 0.015 µg per lane.

**Predicted band size:** 56 kDa



Western blot - Anti-AKT1 + AKT2 + AKT3 antibody (ab126811)

**All lanes :** Anti-AKT1 + AKT2 + AKT3 antibody (ab126811) at 1/1000 dilution

**Lane 1 :** 3T6 cell lysate at 3 µg

**Lane 2 :** 3T6 cell lysate at 10 µg

**Lane 3 :** 3T6 cell lysate at 30 µg

**Predicted band size:** 56 kDa

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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