# abcam

## Product datasheet

## HRP Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] ab200854

Recombinant RabMAb

## 2 Images

#### Overview

**Product name** HRP Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798]

**Description** HRP Rabbit monoclonal [EPR16798] to AKT1 + AKT2 + AKT3

**Host species** Rabbit Conjugation HRP

**Tested applications** Suitable for: WB

Species reactivity Reacts with: Mouse, Rat, Human

**Predicted to work with:** Xenopus tropicalis

Recombinant fragment within Human AKT1 + AKT2 + AKT3 aa 250 to the C-terminus. The exact **Immunogen** 

> immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please contact our Scientific Support team to discuss your requirements. Other SwissProt IDs: P31751,

Q9Y243

Database link: P31749

Run BLAST with Run BLAST with

Positive control WB: Human fetal kidney, mouse brain and rat brain tissue lysates.

**General notes** This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

#### **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle. Store In the Dark.

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Storage buffer pH: 7.40

Preservative: 0.1% Proclin 300 Solution

Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA

**Purity** Protein A purified

Clonality Monoclonal
Clone number EPR16798

**Isotype** IgG

## **Applications**

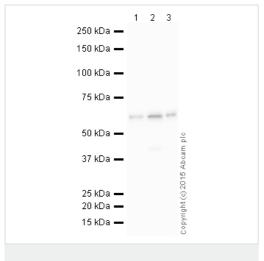
The Abpromise guarantee Our Abpromise guarantee covers the use of ab200854 in the following tested applications.

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

Application	Abreviews	Notes
WB		1/5000. Detects a band of approximately 56 kDa (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 - HRP Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] (ab200854)

**All lanes :** HRP Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] (ab200854) at 1/5000 dilution

Lane 1: Kidney (Human) Tissue Lysate - fetal normal tissue

Lane 2 : Brain (Mouse) Tissue Lysate
Lane 3 : Brain (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

Developed using the ECL technique.

Performed under reducing conditions.

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

Exposure time: 1 minute

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% milk before being incubated with ab200854 overnight at 4°C. Antibody binding was visualised using ECL development solution **ab133406**.



HRP Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] (ab200854)

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

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