


## Product datasheet

### Anti-AKT3 + AKT1 antibody [E45] ab32038

Recombinant RabMAb

[11 References](#) [4 Images](#)

#### Overview

Product name	Anti-AKT3 + AKT1 antibody [E45]
Description	Rabbit monoclonal [E45] to AKT3 + AKT1
Host species	Rabbit
Specificity	This antibody detects Akt1 and Akt3.
Tested applications	<b>Suitable for:</b> IHC-P, WB, ICC/IF <b>Unsuitable for:</b> Flow Cyt
Species reactivity	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat, Cow 
Immunogen	Synthetic peptide corresponding to Human AKT1 aa 450-550. Database link: <a href="#">P31749</a>
Positive control	Squamous lung carcinoma ICC/IF: SK-BR-3 cells
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

#### Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal

**Clone number** E45

**Isotype** IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab32038 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

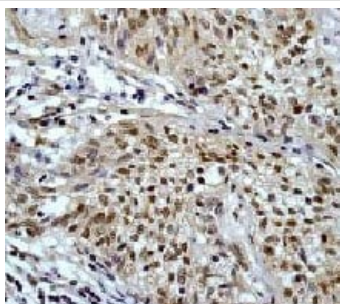
Application	Abreviews	Notes
IHC-P		1/250 - 1/1000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration.
ICC/IF		1/500.

**Application notes** Is unsuitable for Flow Cyt.

## Target

**Cellular localization** AKT3: Cytoplasm. Membrane. Membrane-associated after cell stimulation leading to its translocation. AKT1: Cytoplasm. Nucleus. Cell membrane. Nucleus after activation by integrin-linked protein kinase 1 (ILK1). Nuclear translocation is enhanced by interaction with TCL1A. Phosphorylation on Tyr-176 by TNK2 results in its localization to the cell membrane where it is targeted for further phosphorylations on Thr-308 and Ser-473 leading to its activation and the activated form translocates to the nucleus.

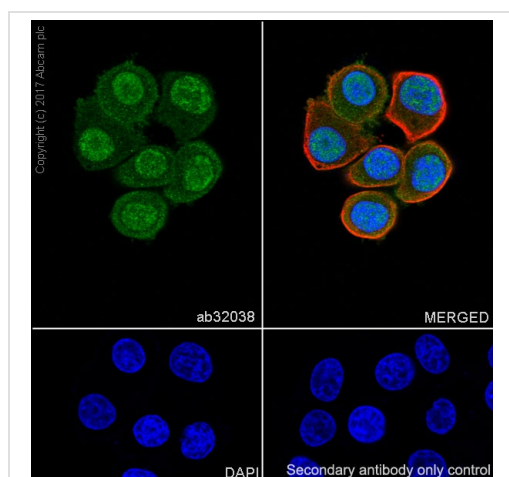
## Images



Immunohistochemistry (Paraffin-embedded sections) analysis using ab32038 at a dilution of 1/1000 - 1/1250 and squamous lung carcinoma

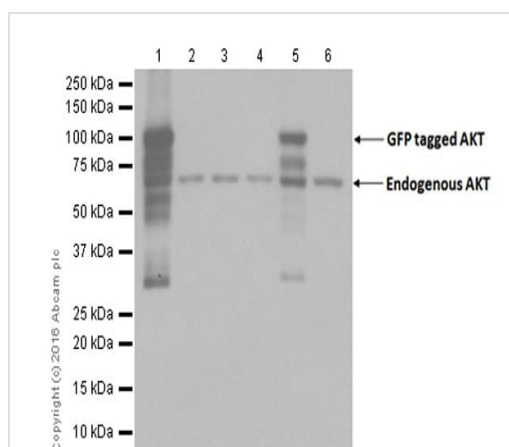
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AKT3 + AKT1 antibody [E45] (ab32038)



Immunocytochemistry/ Immunofluorescence - Anti-AKT3 + AKT1 antibody [E45] (ab32038)

Immunocytochemistry/ Immunofluorescence analysis of SK-BR-3 (human breast adenocarcinoma epithelial cell) cells labeling AKT3+AKT1 with purified ab32038 at 1/500 dilution (2.1 µg/mL). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/mL). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/mL) dilution. DAPI (blue) was used as nuclear counterstain. **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/mL) was used as the secondary antibody only control.



Western blot - Anti-AKT3 + AKT1 antibody [E45] (ab32038)

**All lanes** : Anti-AKT3 + AKT1 antibody [E45] (ab32038) at 1/10000 dilution

**Lane 1** : GFP tagged AKT1 transfected 293T cell lysate

**Lanes 2 & 4 & 6** : Empty vector transfected 293T cell lysate

**Lane 3** : GFP tagged AKT2 transfected 293T cell lysate

**Lane 5** : GFP tagged AKT3 transfected 293T cell lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes** : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

**Exposure time:** 1 second

Blocking/Diluting buffer: 5% NFDm/TBST.

Observed band: 82kDa, 56kDa.

82kDa band represents GFP tagged AKT. 56kDa band represents endogenous AKT.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-AKT3 + AKT1 antibody [E45] (ab32038)

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

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