

Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] ab179463

重组 RabMAb

275 References [12 图像](#)

概述

产品名称	Anti-AKT1 + AKT2 + AKT3抗体[EPR16798]
描述	兔单克隆抗体[EPR16798] to AKT1 + AKT2 + AKT3
宿主	Rabbit
经测试应用	适用于: WB, IHC-P, ICC/IF, IP, Flow Cyt (Intra)
种属反应性	与反应: Mouse, Rat, Human, Xenopus laevis, Xenopus tropicalis
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: MCF7, HeLa, Hep G2 and A549 whole cell lysates; Human fetal brain, heart and kidney lysates; Mouse and Rat brain, heart, kidney and spleen lysates; Xenopus muscle lysate; AKT2 and AKT3 recombinant proteins. IHC-P: Human kidney, Mouse and Rat cerebral cortex. ICC/IF: K562 cells. Flow: A549 cells. IP: MCF7 whole cell lysate
常规说明	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
存储溶液	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR16798

同种型

IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab179463于以下的经测试应用

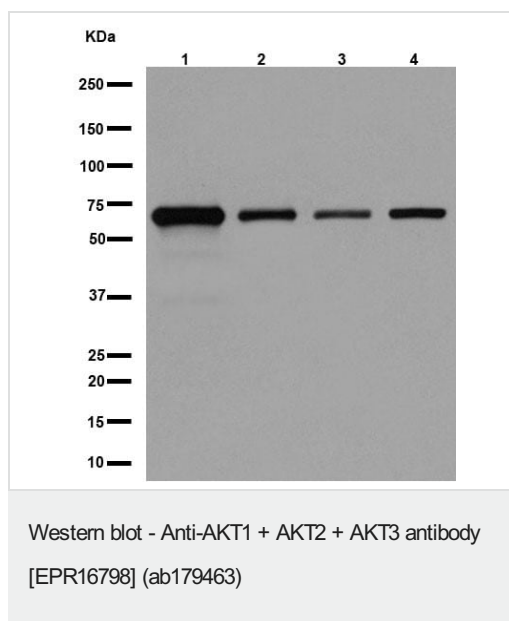
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/10000. Detects a band of approximately 56 kDa (predicted molecular weight: 56 kDa).
IHC-P		1/250. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/100.
IP		1/100.
Flow Cyt (Intra)		1/330. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

靶标

功能	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.
组织特异性	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.
序列相似性	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.
结构域	Binding of the PH domain to the phosphatidylinositol 3-kinase alpha (PI(3)K) results in its targeting to the plasma membrane.
翻译后修饰	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.
细胞定位	Cytoplasm. Membrane. Membrane-associated after cell stimulation leading to its translocation.

图片



All lanes : Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] (ab179463) at 1/10000 dilution

Lane 1 : MCF7 (Human breast adenocarcinoma cell line) whole cell lysates

Lane 2 : HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysates

Lane 3 : Hep G2 (Human liver hepatocellular carcinoma) whole cell lysates

Lane 4 : A549 (Human lung carcinoma) whole cell lysates

Lysates/proteins at 20 µg per lane.

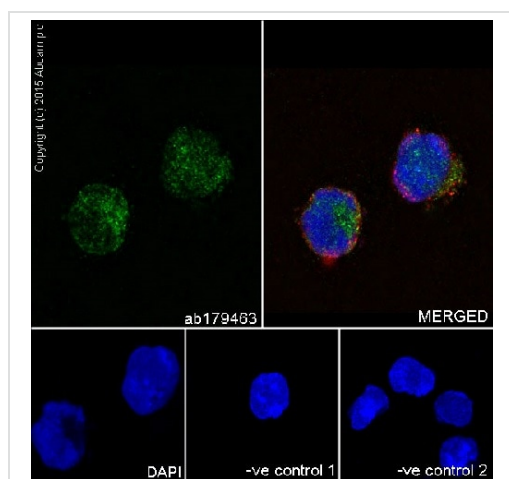
Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 56 kDa

Observed band size: 56 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

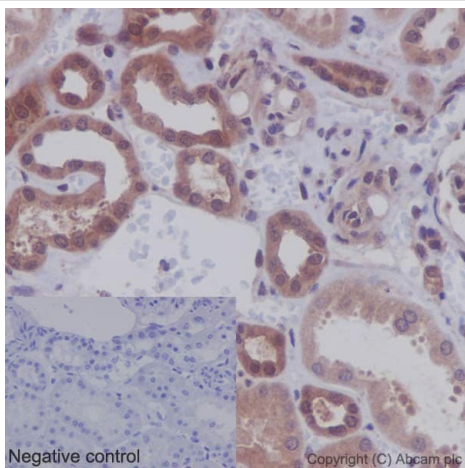


Immunocytochemistry/ Immunofluorescence - Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] (ab179463)

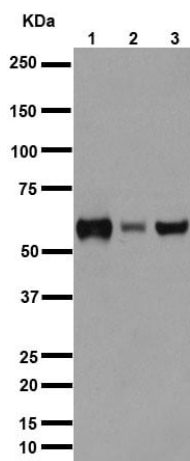
Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized K562 (Human chronic myelogenous leukemia cells from bone marrow) cells labeling AKT1 + AKT2 + AKT3 with ab179463 at 1/100 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/400 dilution (green). Cytoplasm and nuclear staining on K562 cell line is observed. The nuclear counter stain is DAPI (blue). Tubulin is detected with **ab7291** (anti-Tubulin mouse mAb) at 1/500 dilution and **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows;

1. ab179463 at 1/100 dilution followed by **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.
2. **ab7291** (anti-Tubulin mouse mAb) at 1/500 dilution followed by **ab150077** (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/400 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] (ab179463)



Western blot - Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] (ab179463)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling AKT1 + AKT2 + AKT3 with ab179463 at 1/250 dilution, followed by prediluted HRP Polymer for Rabbit/Mouse IgG. Cytoplasm and nucleus staining on Human renal cortex is observed. Counter stained with Hematoxylin.

Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse IgG.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

All lanes : Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] (ab179463) at 1/1000 dilution

Lane 1 : Human fetal brain lysate

Lane 2 : Human fetal heart lysate

Lane 3 : Human fetal kidney lysate

Lysates/proteins at 10 µg per lane.

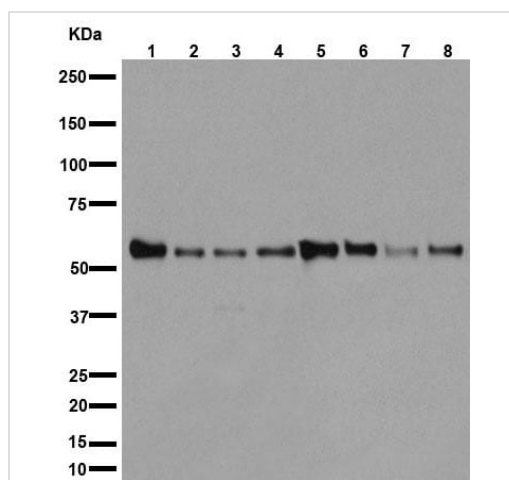
Secondary

All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 56 kDa

Observed band size: 56 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] (ab179463)

All lanes : Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] (ab179463) at 1/1000 dilution

Lane 1 : Mouse brain lysate

Lane 2 : Mouse heart lysate

Lane 3 : Mouse kidney lysate

Lane 4 : Mouse spleen lysate

Lane 5 : Rat brain lysate

Lane 6 : Rat heart lysate

Lane 7 : Rat kidney lysate

Lane 8 : Rat spleen lysate

Lysates/proteins at 10 µg per lane.

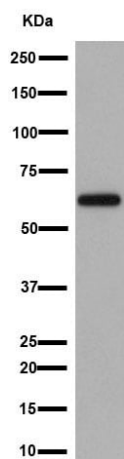
Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 56 kDa

Observed band size: 56 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.



Western blot - Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] (ab179463)

Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] (ab179463) at 1/10000 dilution + Xenopus muscle lysate at 10 µg

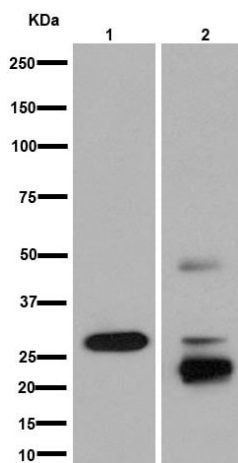
Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 56 kDa

Observed band size: 56 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.



Western blot - Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] (ab179463)

All lanes : Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] (ab179463) at 1/10000 dilution

Lane 1 : AKT2 recombinant protein (HIS-tag): aa282-481

Lane 2 : AKT3 recombinant protein (HIS-tag) :aa351-479

Lysates/proteins at 10 µg per lane.

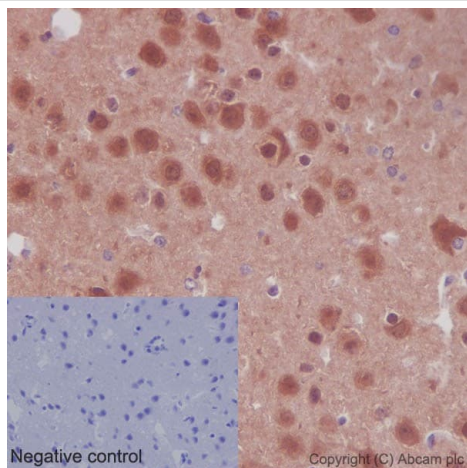
Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 56 kDa

Observed band size: 18,26 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

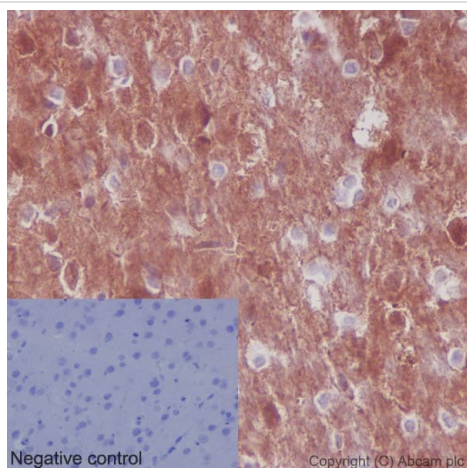


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] (ab179463)

Immunohistochemical analysis of paraffin-embedded Mouse cerebral cortex tissue labeling AKT1 + AKT2 + AKT3 with ab179463 at 1/250 dilution, followed by prediluted HRP Polymer for Rabbit/Mouse IgG. Cytoplasm and nucleus staining on Mouse cerebral cortex is observed. Counter stained with Hematoxylin.

Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse IgG.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

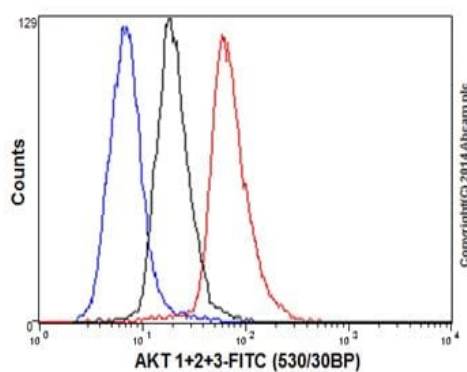


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] (ab179463)

Immunohistochemical analysis of paraffin-embedded Rat cerebral cortex tissue labeling AKT1 + AKT2 + AKT3 with ab179463 at 1/250 dilution, followed by prediluted HRP Polymer for Rabbit/Mouse IgG. Cytoplasm and nucleus staining on Rat cerebral cortex is observed. Counter stained with Hematoxylin.

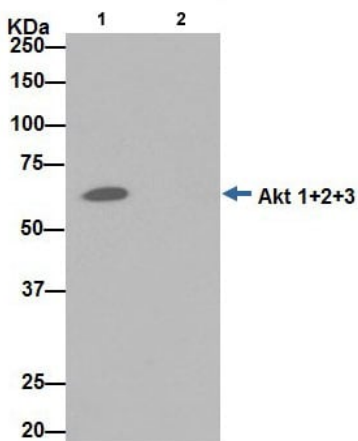
Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse IgG.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] (ab179463)

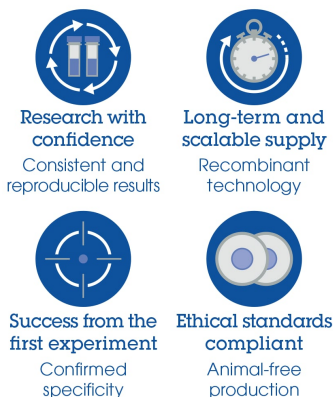
Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed A549 (Human lung carcinoma) cells labeling AKT1 + AKT2 + AKT3 with ab179463 at 1/330 dilution (red) compared with a rabbit monoclonal IgG isotype control (black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (FITC) at 1/150 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] (ab179463)

AKT1 + AKT2 + AKT3 was immunoprecipitated from 1mg of MCF7 (Human breast adenocarcinoma cell line) whole cell extract with ab179463 at 1/100 dilution. Western blot was performed from the immunoprecipitate using ab179463 at 1/1000 dilution. Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG, was used as secondary antibody at 1/1500 dilution. Lane 1: MCF7 whole cell extract. Lane 2: PBS instead of MCF7 whole cell extract. Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Why choose a recombinant antibody?



Anti-AKT1 + AKT2 + AKT3 antibody [EPR16798] (ab179463)

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