abcam

Product datasheet

Anti-AKT1 + AKT2 antibody [EPR18405] ab188099

リコンビナント RabMAb

6 References 画像数 13

製品の概要

製品名	Anti-AKT1 + AKT2 antibody [EPR18405]
製品の詳細	Rabbit monoclonal [EPR18405] to AKT1 + AKT2
由来種	Rabbit
アプリケーション	**適用あり:** Flow Cyt (Intra), IHC-P, WB, ICC/IF
種交差性	**交差種:** Mouse, Rat, Human, Recombinant fragment
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: AKT1 and AKT2 recombinant protein; HeLa, HepG2, A549, MCF-7, PC12 and NIH/3T3 whole cell lysate; Human fetal kidney lysate; Mouse brain lysate, Rat brain and heart lysate. IHC-P: Human kidney, Human gastric adenocarcinoma, Mouse liver and Rat kidney tissue. ICC/IF: HeLa and NIH/3T3 cells. Flow Cyt (intra): HeLa cells.
特記事項	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**.

製品の特性

製品の状態	Liquid
保存方法	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.
バッファー	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR18405

アイソタイプ IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab188099の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

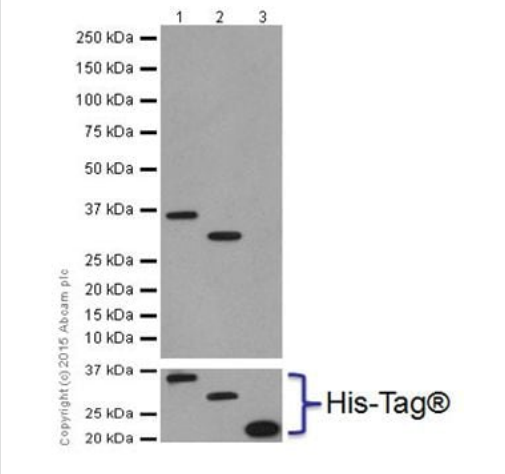
アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/200.
IHC-P		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		1/2000. Detects a band of approximately 56 kDa (predicted molecular weight: 56 kDa).
ICC/IF		1/500.

ターゲット情報

関連性 The serine/threonine kinase AKT (protein kinase B or PKB) has a central role in the regulation of several signaling pathways controlling cell proliferation, apoptosis, angiogenesis, and diabetes. In humans, there are three genes in the "AKT family": AKT1, AKT2, and AKT3. AKT1 is catalytically inactive in serum starved primary and immortalized fibroblasts. AKT1 and the related AKT2 are activated by platelet derived growth factor. The activation is rapid and specific. In the developing nervous system AKT is a critical mediator of growth factor induced neuronal survival. Survival factors can suppress apoptosis in a transcription independent manner by activating the serine/threonine kinase AKT1, which then phosphorylates and inactivates components of the apoptotic machinery. AKT2 is a putative oncogene and is a general protein kinase capable of phophorylating several known proteins. AKT2 is amplified and overexpressed in some human carcinomas. AKT2 acts primarily as a regulator of glucose metabolism.

細胞内局在 ATK1: Cytoplasm. Nucleus. Cell membrane. Note: Nucleus after activation by integrin-linked protein kinase 1 (ILK1). Nuclear translocation is enhanced by interaction with TCL1A.

画像



Western blot - Anti-AKT1 + AKT2 antibody [EPR18405] (ab188099)

All lanes : Anti-AKT1 + AKT2 antibody [EPR18405] (ab188099) at 1/20000 dilution

Lane 1 : AKT1 recombinant protein fragment (His-Tag®): aa250-481
Lane 2 : AKT2 recombinant protein fragment (His-Tag®): aa282-481
Lane 3 : AKT3 recombinant protein fragment (His-Tag®): aa351-479

Lysates/proteins at 0.01 µg per lane.

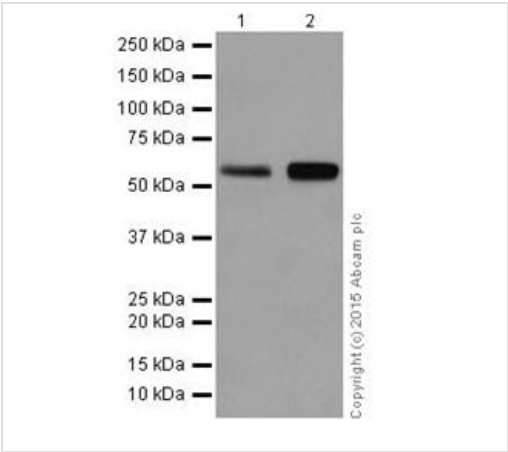
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/1000 dilution

Predicted band size: 56 kDa

Exposure time: 10 seconds

Blocking/dilution buffer: 5% NFDM/TBST.

All three Human AKT recombinant protein fragments containing an N-terminal His-Tag® were made in house.



Western blot - Anti-AKT1 + AKT2 antibody [EPR18405] (ab188099)

All lanes : Anti-AKT1 + AKT2 antibody [EPR18405] (ab188099) at 1/2000 dilution

Lane 1 : HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate
Lane 2 : MCF-7 (Human breast adenocarcinoma) whole cell lysate

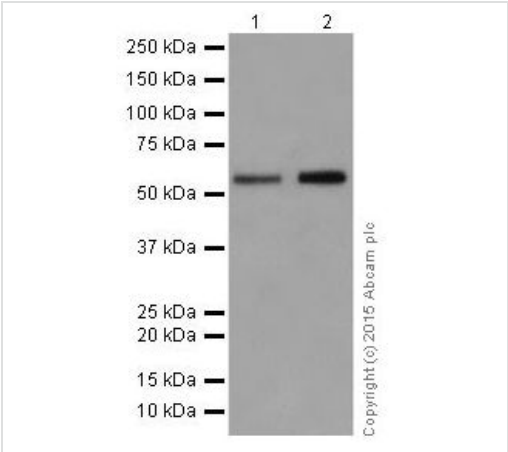
Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/1000 dilution

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

Exposure time: 5 seconds

Blocking/dilution buffer: 5% NFDM/TBST.



Western blot - Anti-AKT1 + AKT2 antibody [EPR18405] (ab188099)

All lanes : Anti-AKT1 + AKT2 antibody [EPR18405] (ab188099) at 1/2000 dilution

Lane 1 : HepG2 (Human liver hepatocellular carcinoma) whole cell lysate
Lane 2 : A549 (Human lung carcinoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

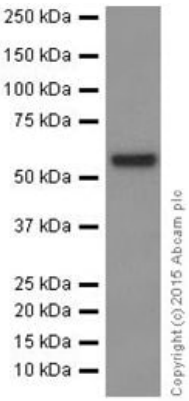
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/1000 dilution

Predicted band size: 56 kDa

Observed band size: 56 kDa

Exposure time: 15 seconds

Blocking/dilution buffer: 5% NFDM/TBST.



Western blot - Anti-AKT1 + AKT2 antibody [EPR18405] (ab188099)

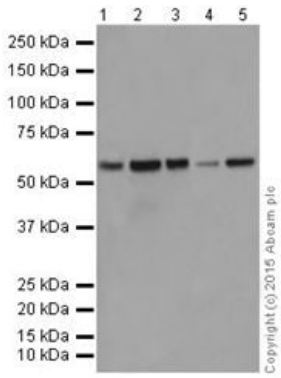
Anti-AKT1 + AKT2 antibody [EPR18405] (ab188099) at 1/2000 dilution + Human fetal kidney lysate at 10 µg

Secondary
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

Exposure time: 3 minutes

Blocking/dilution buffer: 5% NFDM/TBST.



Western blot - Anti-AKT1 + AKT2 antibody [EPR18405] (ab188099)

All lanes : Anti-AKT1 + AKT2 antibody [EPR18405] (ab188099) at 1/2000 dilution

Lane 1 : Mouse brain lysate
Lane 2 : Rat brain lysate
Lane 3 : Rat heart lysate
Lane 4 : PC-12 (rat adrenal gland pheochromocytoma) whole cell lysate
Lane 5 : NIH/3T3 (mouse embryo fibroblast) whole cell lysate

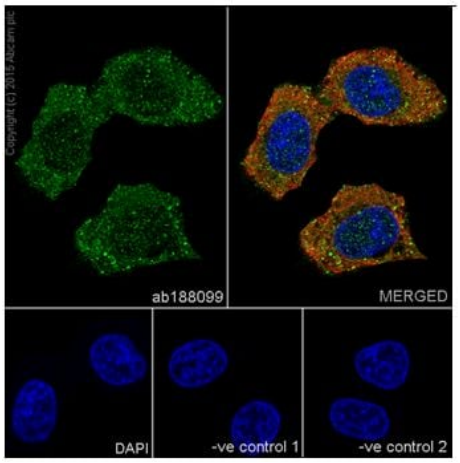
Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/1000 dilution

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

Exposure time: 15 seconds

Blocking/dilution buffer: 5% NFDM/TBST.



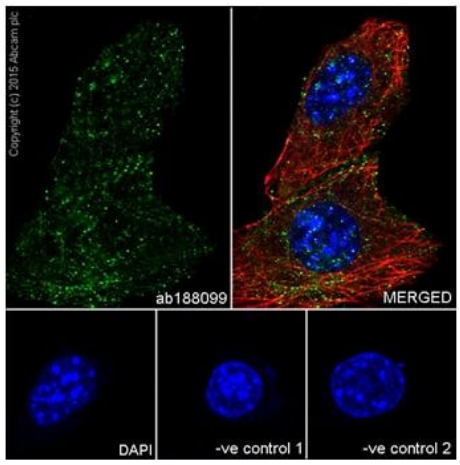
Immunocytochemistry/ Immunofluorescence - Anti-AKT1 + AKT2 antibody [EPR18405] (ab188099)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling AKT1 + AKT2 with ab188099 at 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/500 dilution (green).

Confocal image showing cytoplasmic and weakly nuclear staining on HeLa cells.

The nuclear counterstain is DAPI (blue).

Tubulin is detected with **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution and **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).
The negative controls are as follows:-
-ve control 1 - ab188099 at 1/500 dilution followed by **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.
-ve control 2. - **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution followed by **ab150077** (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/500 dilution.



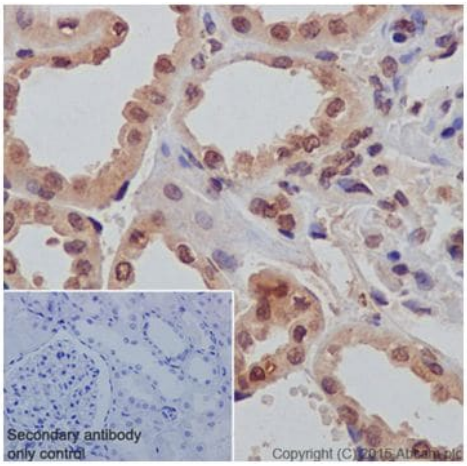
Immunocytochemistry/ Immunofluorescence - Anti-AKT1 + AKT2 antibody [EPR18405] (ab188099)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized NIH/3T3 (mouse embryonic fibroblast cell line) cells labeling AKT1 + AKT2 with ab188099 at 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/500 dilution (green).

Confocal image showing cytoplasmic and nuclear staining on NIH/3T3 cells.

The nuclear counterstain is DAPI (blue).

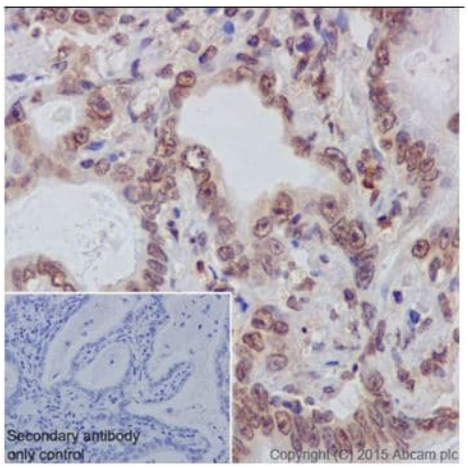
Tubulin is detected with **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution and **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).
The negative controls are as follows:-
-ve control 1 - ab188099 at 1/500 dilution followed by **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.
-ve control 2. - **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution followed by **ab150077** (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/500 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AKT1 + AKT2 antibody [EPR18405] (ab188099)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling AKT1 + AKT2 with ab188099 at 1/100 dilution followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.
Nucleus and cytoplasm staining on normal Human kidney is observed.
Counter stained with Hematoxylin.
Negative control: Used PBS instead of primary ab, secondary ab is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**).

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



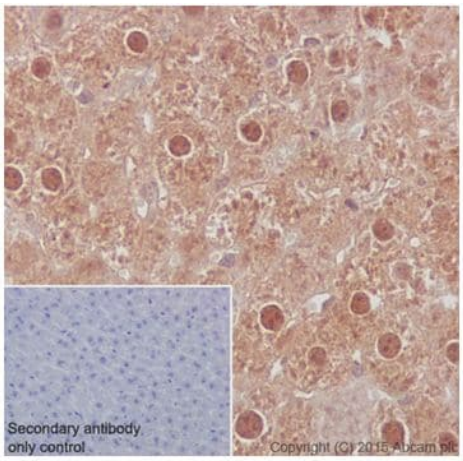
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AKT1 + AKT2 antibody [EPR18405] (ab188099)

Immunohistochemical analysis of paraffin-embedded
Human gastric adenocarcinoma tissue labeling AKT1 + AKT2 with ab188099 at 1/100 dilution followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

Nucleus and cytoplasm staining on tumor cells of gastric adenocarcinoma is observed.

Counter stained with Hematoxylin.
Negative control: Used PBS instead of primary ab, secondary ab is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**).

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



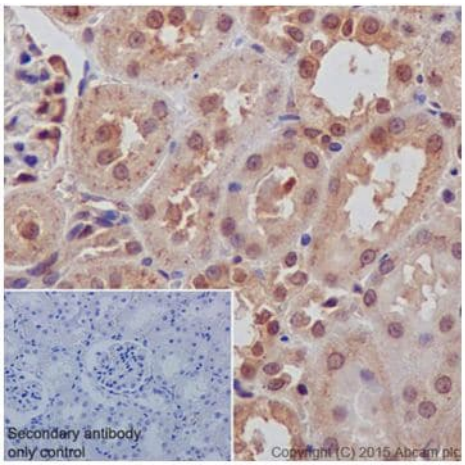
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AKT1 + AKT2 antibody [EPR18405] (ab188099)

Immunohistochemical analysis of paraffin-embedded Mouse liver tissue labeling AKT1 + AKT2 with ab188099 at 1/100 dilution followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

Nucleus and cytoplasm staining on hepatocytes of mouse liver is observed.

Counter stained with Hematoxylin.
Negative control: Used PBS instead of primary ab, secondary ab is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**).

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



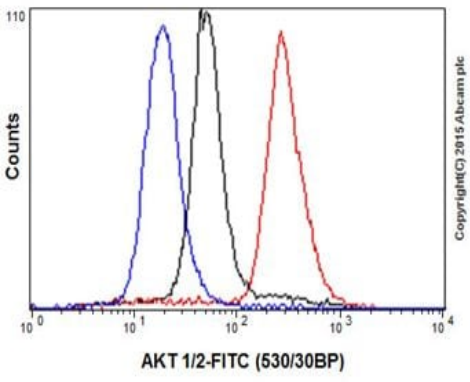
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AKT1 + AKT2 antibody [EPR18405] (ab188099)

Immunohistochemical analysis of paraffin-embedded Rat kidney tissue labeling AKT1 + AKT2 with ab188099 at 1/100 dilution followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

Nucleus and cytoplasm staining on rat kidney is observed.

Counter stained with Hematoxylin.
Negative control: Used PBS instead of primary ab, secondary ab is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**).

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



Flow Cytometry (Intracellular) - Anti-AKT1 + AKT2 antibody [EPR18405] (ab188099)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling AKT1/2 with ab188099 at 1/200 dilution (red) compared with a rabbit monoclonal IgG isotype control (**ab172730**,black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (FITC) at 1/500 dilution was used as the secondary antibody.

Anti-AKT1 + AKT2 antibody [EPR18405] (ab188099)

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