

Anti-AKT1 (phospho S473) antibody ab8932

[60 References](#) [画像数 7](#)

製品の概要

製品名	Anti-AKT1 (phospho S473) antibody
製品の詳細	Rabbit polyclonal to AKT1 (phospho S473)
由来種	Rabbit
特異性	The region of AKT1 surrounding S473 has a high degree of similarity to the corresponding regions in AKT2 and AKT3 and thus may cross react with these proteins if phosphorylated on the corresponding serine residue.
アプリケーション	適用あり: ICC/IF, IHC-P, WB
種交差性	交差種: Human
免疫原	Synthetic peptide corresponding to Human AKT1 aa 450-550 (C terminal) (phospho S473) conjugated to keyhole limpet haemocyanin. Run BLAST with Run BLAST with
特記事項	<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&As</p>

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
バッファー	Preservative: 0.01% Sodium azide Constituents: 0.424% Potassium phosphate, 0.87% Sodium chloride
精製度	Immunogen affinity purified
特記事項(精製)	This product was prepared from monospecific antiserum by immunoaffinity chromatography using phospho peptide coupled to agarose beads followed by solid phase adsorption(s) against non-phospho peptide and non-specific peptide to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum.

Contains 1 PH domain.
Contains 1 protein kinase domain.

ドメイン

Binding of the PH domain to the phosphatidylinositol 3-kinase alpha (PI(3)K) results in its targeting to the plasma membrane. The PH domain mediates interaction with TNK2 and Tyr-176 is also essential for this interaction.

The AGC-kinase C-terminal mediates interaction with THEM4.

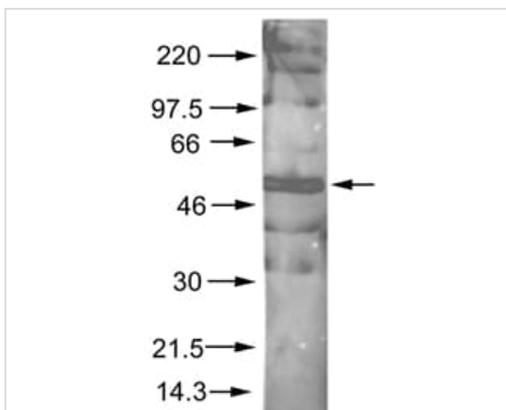
翻訳後修飾

Phosphorylation on Thr-308, Ser-473 and Tyr-474 is required for full activity. Activated TNK2 phosphorylates it on Tyr-176 resulting in its binding to the anionic plasma membrane phospholipid PA. This phosphorylated form localizes to the cell membrane, where it is targeted by PDPK1 and PDPK2 for further phosphorylations on Thr-308 and Ser-473 leading to its activation. Ser-473 phosphorylation by mTORC2 favors Thr-308 phosphorylation by PDPK1. Ser-473 phosphorylation is enhanced by interaction with AGAP2 isoform 2 (PIKE-A). Ser-473 phosphorylation is enhanced in focal cortical dysplasias with Taylor-type balloon cells. Ubiquitinated; undergoes both 'Lys-48'- and 'Lys-63'-linked polyubiquitination. TRAF6-induced 'Lys-63'-linked AKT1 ubiquitination is critical for phosphorylation and activation. When ubiquitinated, it translocates to the plasma membrane, where it becomes phosphorylated. When fully phosphorylated and translocated into the nucleus, undergoes 'Lys-48'-polyubiquitination catalyzed by TTC3, leading to its degradation by the proteasome.

細胞内局在

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.

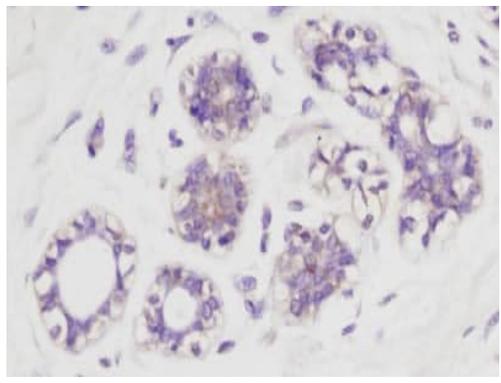
画像



Western blot - Anti-AKT1 (phospho S473) antibody
(ab8932)

ab8932 at a 1:200 dilution in Western Blot staining nuclear extract from cells infected with adenovirus expressing nuclear-targeted Akt kinase.

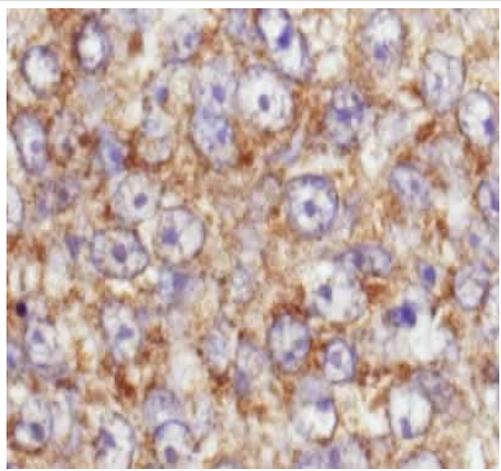
ab8932 at a 1:200 dilution in Western Blot staining nuclear extract from cells infected with adenovirus expressing nuclear-targeted Akt kinase.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AKT1 (phospho S473) antibody (ab8932)

Normal human breast tissue. Akt is weakly phosphorylated in normal tissue in the breast. The phosphorylated Akt is clearly localised in the cytoplasm.

The phospho Ser 473 Akt antibody (ab8932) is used with no pretreatment at a dilution of 1:100 using Dako techmate streptavidin-biotin reagents.

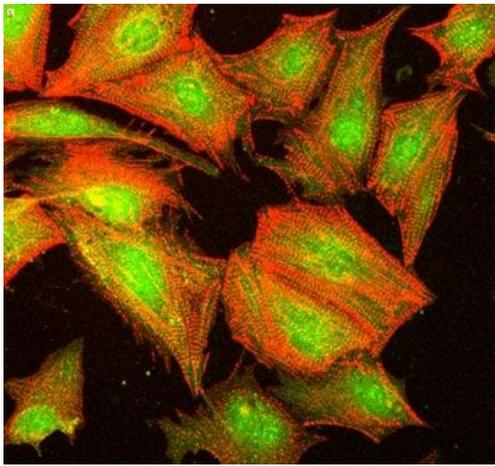


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AKT1 (phospho S473) antibody (ab8932)

Akt is phosphorylated on Ser 473 in human breast tumor. The staining is much stronger than the weak basal level of phosphorylation in normal breast. The staining is cytoplasmic, as in normal tissue.

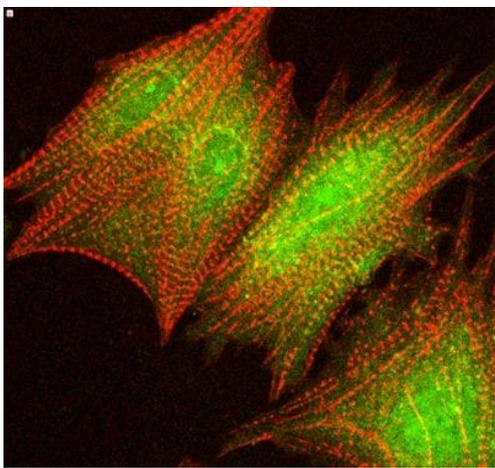
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This image is a magnification of the accompanying breast tumor image.



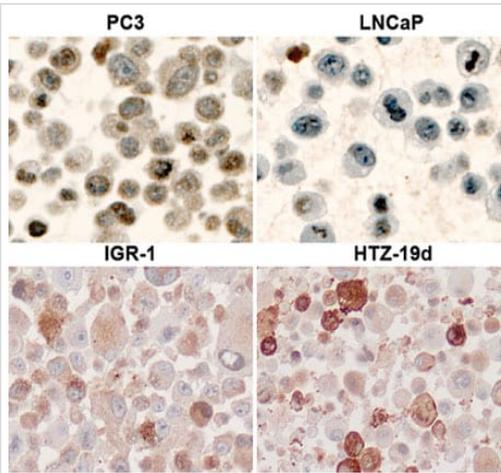
Immunocytochemistry/ Immunofluorescence - Anti-AKT1 (phospho S473) antibody (ab8932)

Confocal image of ab8932 at a 1:40 dilution staining cardiomyocytes infected with wild-type Akt in conjunction with a texas-red conjugated phalloidin to label filamentous actin in the cardiomyocytes.



Immunocytochemistry/ Immunofluorescence - Anti-AKT1 (phospho S473) antibody (ab8932)

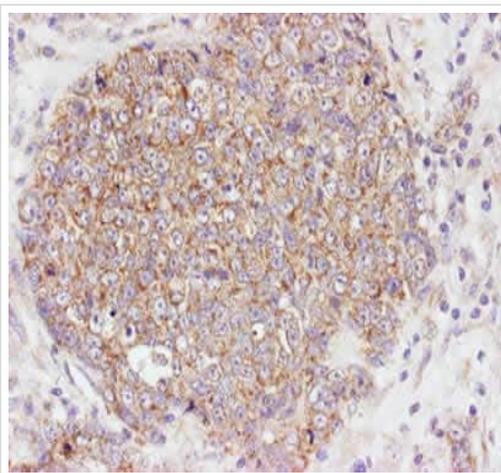
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Immunohistochemical analysis of Human prostate cancer and melanoma cell lines, staining AKT1 (phospho S473) with ab8932.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AKT1 (phospho S473) antibody (ab8932)

Image from Meyer S et al., PLoS One. 2012;7(6):e38222. Epub 2012 Jun 7. Fig S5.; doi:10.1371/journal.pone.0038222; June 7, 2012, PLoS ONE 7(6): e38222.



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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AKT1 (phospho S473) antibody (ab8932)

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