Anti-Phospho-AKT1 (Ser129) Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R013990

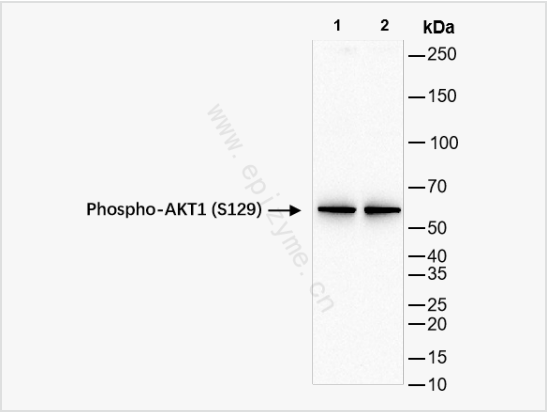
Product Information

Application	WB, IF (Cell)/ICC, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:1,000~1:2,000; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	26P81I31
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human AKT1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Phospho-AKT1 (Ser129) Rabbit mAb [26P81I31] is for research use only and not for use in diagnostic or therapeutic procedures.

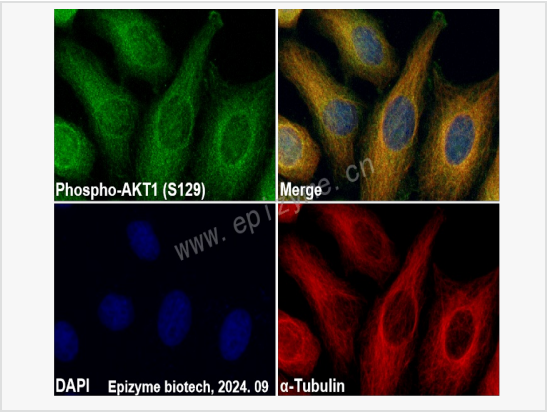
Protein Information

Synonyms	AKT 1, AKT, AKT1, AKT1_HUMAN, C AKT, cAKT, MGC99656, PKB alpha, PKB, PKB-ALPHA, PRKBA, Protein Kinase B Alpha, Protein kinase B, Proto-oncogene c-Akt, RAC Alpha, RAC, Rac protein kinase alpha, RAC Serine/Threonine Protein Kinase, RAC-alpha serine/threonine-protein kinase, RAC-PK-alpha, v akt murine thymoma viral oncogene homolog 1, vAKT Murine Thymoma Viral Oncogene Homolog 1.
Calculated MW	Calculated MW: 55 kDa; Observed MW: 60 kDa
Uniprot ID	P31749
Gene ID	207
Background	Akt, also referred to as PKB or Rac, plays a critical role in controlling survival and apoptosis. This protein kinase is activated by insulin and various growth and survival factors to function in a wortmannin-sensitive pathway involving PI3 kinase. Akt is activated by phospholipid binding and activation loop phosphorylation at Thr308 by PDK1 and by phosphorylation within the carboxy terminus at Ser473.
Cellular Location	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.
Tissue Location	Expressed in all human cell types so far analyzed. The Tyr-176 phosphorylated form shows a significant increase in expression

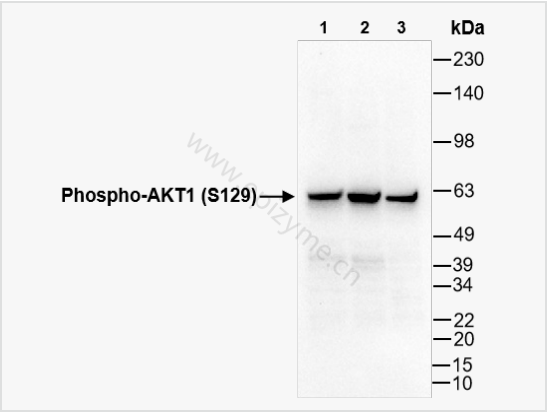
Validation Images



Western Blot - Anti-Phospho-AKT1 (Ser129) Rabbit mAb [26P81I31]
All lanes: R013990 at 1:1,000 dilution
Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates
Lane 2: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 55 kDa
Observed band size: 60 kDa
Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-Phospho-AKT1 (Ser129) Rabbit mAb [26P81I31]
Sample: HeLa cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: R013990 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).



Western Blot -Anti-Phospho-AKT1 (Ser129) Rabbit mAb [26P81I31]
All lanes: R013990 at 1:1,000 dilution
Lane 1: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates
Lane 2: Raw264.7 (Mouse mononuclear macrophage leukemia cell)whole cell lysates
Lane 3: PC-12(Rat adrenal pheochromocytoma epithelial cell)whole cell lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 55 kDa
Observed band size: 60 kDa
Developed using the ECL technique (Cat. No. SQ201).