Phospho-Akt (Thr308) Ab

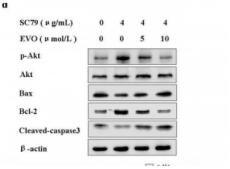
Cat.#: AF3262	Concn.: 1mg/ml	Mol.Wt.: 60kDa
Size: 100ul,200ul	Source: Rabbit	Clonality: Polyclonal

Application:	WB 1:500-1:2000 IHC 1:50-1:200, IF/ICC 1:100-1:500
Reactivity:	Human,Mouse,Rat
Purification:	The Ab is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Specificity:	Phospho-Akt (Thr308) Ab detects endogenous levels of Akt only when phosphorylated at Threonine 308.
Immunogen:	A synthesized peptide derived from human Akt around the phosphorylation site of Threonine 308.
Uniprot:	P31749/P31751/Q9Y243
Description:	Akt2 an AGC kinase. Plays critical roles in glucose metabolism and the development or maintenance of proper adipose tissue and islet mass for which other Akt/PKB isoforms are unable to fully compensate. Amplified and overexpressed in human ovarian carcinoma cell lines and amplified in some primary ovarian and pancreatic tumors. Antisense blocks invasiveness in xenografts.
Subcellular 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 Specificity:	Expressed in prostate cancer and levels increase from the normal to the malignant state (at protein level). Expressed in all human cell types so far analyzed. The Tyr-176 phosphorylated form shows a significant increase in expression in breast cancers during the progressive stages i.e. normal to hyperplasia (ADH), ductal carcinoma in situ (DCIS), invasive ductal carcinoma (IDC) and lymph node metastatic (LNMM) stages.
Similarity:	Binding of the PH domain to phosphatidylinositol 3,4,5-trisphosphate (PI(3,4,5)P3) following phosphatidylinositol 3-kinase alpha (PIK3CA) activity results in its targeting to the plasma membrane. The PH domain

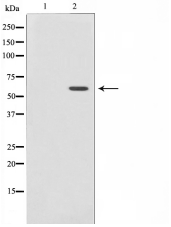
mediates interaction with TNK2 and Tyr-176 is also essential for this interaction.The AGC-kinase C-terminal mediates interaction with THEM4.Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. RAC subfamily.

Storage Condition and Buffer:

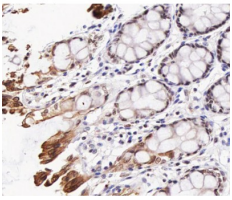
Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt.



Anti-tumor effect of evodiamine by inducing Akt-mediated apoptosis in hepatocellular carcinoma F Yang, L Shi, T Liang, L Ji, G Zhang, Y Shen



Western blot analysis of Akt phosphorylation expression in Insulin treated 293 whole cell lysates,The lane on the left is treated with the antigen-specific peptide.



AF3262 at 1/200 staining human colon cancer tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.

AF3262 staining Hela by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25°C. The primary Ab was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary Ab.

IMPORTANT: For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.