

Akt2 Polyclonal Antibody

YT0187 Catalog No:

Reactivity: Human; Mouse; Rat

WB;IHC;IF;ELISA **Applications:**

Target: Akt2

Fields: >>EGFR tyrosine kinase inhibitor resistance;>>Endocrine

> resistance:>>Platinum drug resistance:>>MAPK signaling pathway:>>ErbB signaling pathway;>>Ras signaling pathway;>>Rap1 signaling pathway;>>cGMP-PKG signaling pathway;>>cAMP signaling pathway;>>Chemokine signaling pathway;>>HIF-1 signaling pathway;>>FoxO signaling pathway;>>Sphingolipid signaling pathway;>>Phospholipase D signaling pathway;>>Autophagy animal;>>mTOR signaling pathway;>>PI3K-Akt signaling pathway;>>AMPK signaling pathway;>>Apoptosis;>>Longevity regulating pathway;>>Longevity regulating pathway - multiple species;>>Cellular senescence;>>Adrenergic signaling in cardiomyocytes;>>VEGF signaling pathway;>>Apelin signaling pathway:>>Osteoclast differentiation:>>Focal adhesion:>>Signaling pathways

regulating pluripotency of stem cells;>>Platelet activation;>>Neutrophil

extracellular trap formation;>>Toll-like receptor signaling pathway;>>C-type lectin receptor signaling pathway;>>JAK-STAT signaling pathway;>>T cell recept

Gene Name: AKT2

Protein Name: RAC-beta serine/threonine-protein kinase

Human Gene Id: 208

Human Swiss Prot

No:

P31751

Mouse Gene Id: 11652

Mouse Swiss Prot

Q60823

No:

Rat Gene Id: 25233

Rat Swiss Prot No: P47197



Immunogen: The antiserum was produced against synthesized peptide derived from human

Akt2. AA range:432-481

Specificity: Akt2 Polyclonal Antibody detects endogenous levels of Akt2 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution : WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not

yet tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 56kD

Cell Pathway: Regulation_Microtubule; Stem cell pathway; T_Cell_Receptor; Regulates

Angiogenesis; Insulin Receptor; Toll Like; ErbB/HER; AMPK;

MAPK_ERK_Growth;MAPK_G_Protein; B_Cell_Antigen; Adherens_Junction;

PI3K

Background: This gene is a putative oncogene encoding a protein belonging to a subfamily of

serine/threonine kinases containing SH2-like (Src homology 2-like) domains. The gene was shown to be amplified and overexpressed in 2 of 8 ovarian carcinoma cell lines and 2 of 15 primary ovarian tumors. Overexpression contributes to the malignant phenotype of a subset of human ductal pancreatic cancers. The encoded protein is a general protein kinase capable of phophorylating several

known proteins. [provided by RefSeq, Jul 2008],

Function: catalytic activity:ATP + a protein = ADP + a phosphoprotein.,disease:Alterations

of AKT2 may contribute to the pathogenesis of ovarian carcinomas.,enzyme regulation:Two specific sites, one in the kinase domain (Thr-309) and the other in the C-terminal regulatory region (Ser-474), need to be phosphorylated for its full activation.,function:General protein kinase capable of phosphorylating several

known proteins., similarity: Belongs to the protein kinase

superfamily.,similarity:Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. RAC subfamily.,similarity:Contains 1 AGC-kinase C-terminal domain.,similarity:Contains 1 PH domain.,similarity:Contains 1 protein kinase domain.,subunit:Interacts (via PH domain) with MTCP1, TCL1A AND

TCL1B., tissue specificity: In all human cell types so far analyzed.,

2/4

Subcellular Location:

Cytoplasm. Nucleus. Cell membrane; Peripheral membrane protein. Early endosome. Localizes within both nucleus and cytoplasm of proliferative primary myoblasts and mostly within the nucleus of differentiated primary myoblasts. By virtue of the N-terminal PH domain, is recruited to sites of the plasma membrane containing increased PI(3,4,5)P3 or PI(3,4)P2, cell membrane targeting is also facilitared by interaction with CLIP3. Colocalizes with WDFY2 in early endosomes (By similarity)...

Expression: Expressed in all cell types so far analyzed.

Akt2

orthogonal Tag:

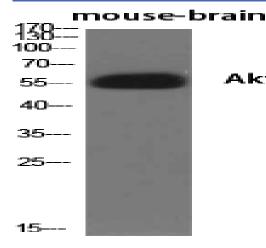
Sort: 1869

No4: 1

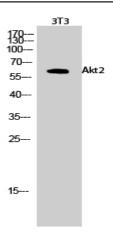
Host: Rabbit

Modifications: Unmodified

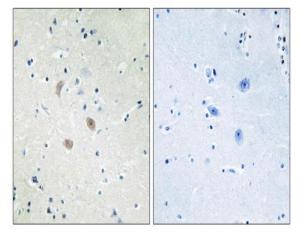
Products Images



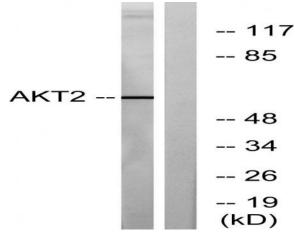
Western Blot analysis of various cells using Akt2 Polyclonal Antibody diluted at 1:500



Western Blot analysis of 3T3 cells using Akt2 Polyclonal Antibody diluted at 1:500



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using Akt2 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from A2780 cells, treated with TNF- α , using Akt2 Antibody. The lane on the right is blocked with the synthesized peptide.