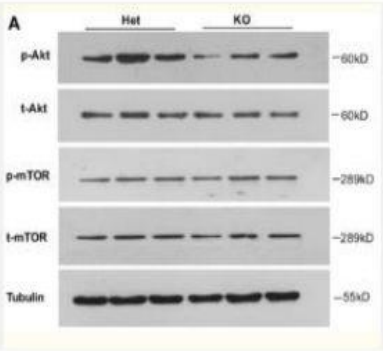
# PRODUCT DATA SHEET

## Akt Polyclonal Antibody

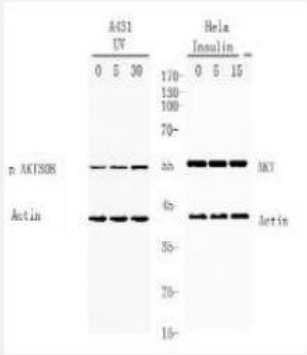
| | |
|---|---|
| **Catalog No.** | IPB0094 |
| **Reactivity** | Human; Mouse; Rat |
| **Applications** | WB; IHC-p; ELISA |
| **Dilution** | WB: 1:500-1:2000 IHC: 1:50-1:200 ELISA: 1:10000 |
| **Gene Name** | AKT1:AKT2:AKT3 |
| **Protein Name** | RAC-alpha serine/threonine-protein kinase/RAC-beta serine/threonine-protein kinase/RAC-gamma serine/threonine-protein kinase |
| **Human Gene Id** | 207:208:10000 |
| **Swiss-Prot** | P31749:P31751:Q9Y243 |
| **Formulation** | Liquid in PBS containing 50% glycerol, 05% BSA and 002% sodium azide |
| **Source** | Rabbit |
| **Purification** | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen |
| **Concentration** | 1 mg/ml |
| **Storage&Stability** | -20°C/1 year |
| **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 Colocalizes with WDFY2 in intracellular vesicles (PubMed:16792529) |
| **MW** | 55716 |
| **Background** | The serine-threonine protein kinase encoded by the AKT1 gene 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, and it is abrogated by mutations in the pleckstrin homology domain of AKT1 It was shown that the activation occurs through phosphatidylinositol 3-kinase 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 Mutations in this gene have been associated with the Proteus syndrome Multiple alternatively spliced transcript variants have been found for this gene |

## Products Images:

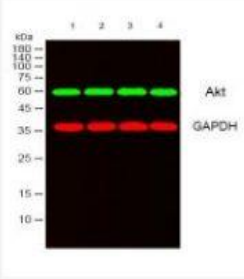
# PRODUCT DATA SHEET



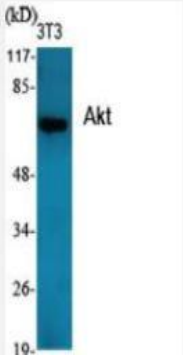

Wang, Bin, et al. "Loss of Tctn3 causes neuronal apoptosis and neural tube defects in mice." Cell death & disease 9.5 (2018): 520.




Western blot analysis of lysates from A431 and Hela cells treated with UV or insulin 0.01U/ml, using AKT Antibody. Primary Antibody was diluted at 1:1000 4° over night,secondary antibody(Immunoway cat:RS23920)was diluted at 1:10000, 37° 1hour.

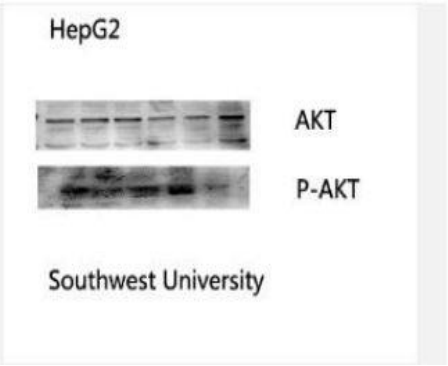



Western blot analysis of lysates from 1) 3T3, 2) HepG2 ,3) Hela,4) A549 cells, (Green) primary antibody was diluted at 1:1000, 4°over night, secondary antibody(cat:RS23920)was diluted at 1:10000, 37° 1hour. (Red) GAPDH Monoclonal Antibody(2B8) (cat:YM3029) antibody was diluted at 1:5000 as loading control, 4° over night,secondary antibody(cat:RS23710)was diluted at 1:10000, 37° 1hour.

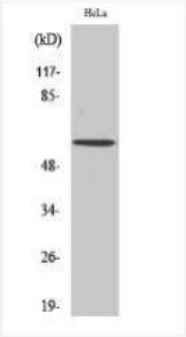



Western Blot analysis of various cells using Akt Polyclonal Antibody diluted at 1:2000

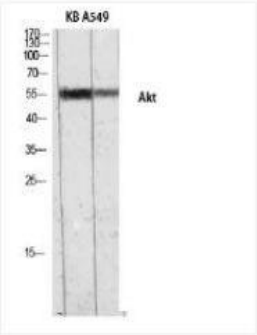
# PRODUCT DATA SHEET



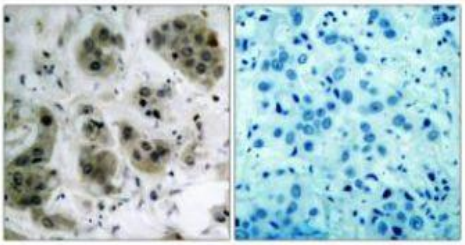

The picture was kindly provided by our customer




Western Blot analysis of HeLa cells using Akt Polyclonal Antibody diluted at 1:2000

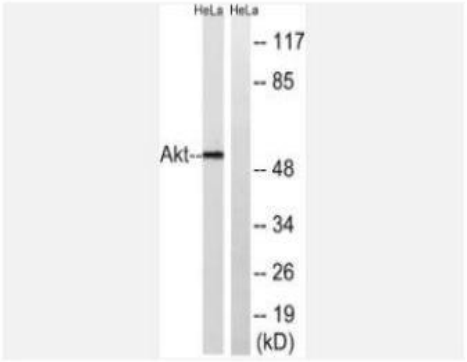



Western Blot analysis of KB A549 using Akt Polyclonal Antibody diluted at 1:2000



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

# PRODUCT DATA SHEET




Western blot analysis of lysates from HeLa cells, using Akt Antibody. The lane on the right is blocked with the synthesized peptide.