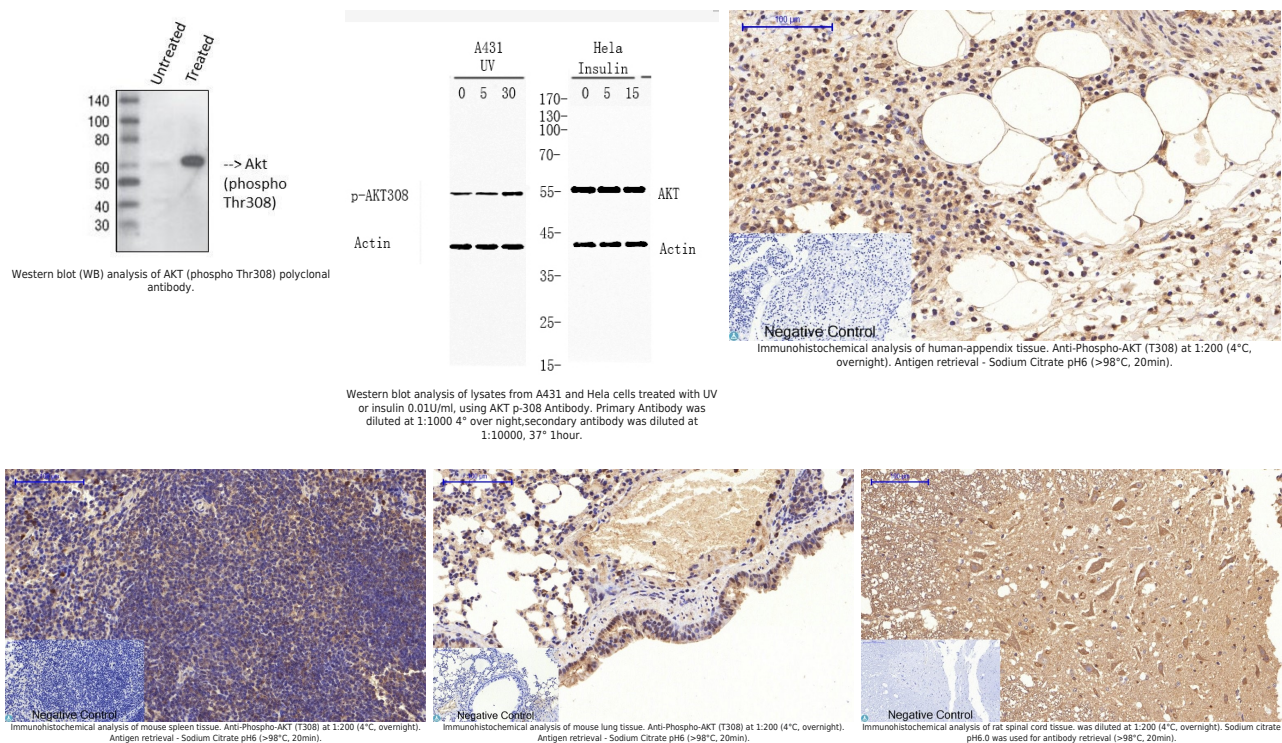


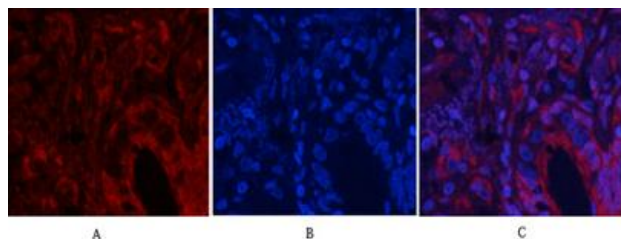
|                          |                                                                                                                     |
|--------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>Product name:</b>     | Phospho-AKT 1 (T308) Rabbit Polyclonal Antibody                                                                     |
| <b>Cat number:</b>       | ABP10037                                                                                                            |
| <b>Conjugate:</b>        | Unconjugated                                                                                                        |
| <b>Size:</b>             | 100 ug                                                                                                              |
| <b>Clone:</b>            | Poly                                                                                                                |
| <b>Concentration:</b>    | 1mg/ml                                                                                                              |
| <b>Host:</b>             | Rabbit                                                                                                              |
| <b>Isotype:</b>          | IgG                                                                                                                 |
| <b>Immunogen:</b>        | Synthesized peptide derived from human Akt around the phosphorylation site of T308.                                 |
| <b>Reactivity:</b>       | Human, Mouse, Rat                                                                                                   |
| <b>Applications:</b>     | Western Blot: 1:500-1:2000 Immunofluorescence:<br>1:50-200Immunohistochemistry: 1:100-1:300 ELISA: 1:20000          |
| <b>Molecular Weight:</b> | 56 kDa                                                                                                              |
| <b>Purification:</b>     | The antibody was affinity-purified from rabbit antiserum by affinitychromatography using epitope-specific immunogen |
| <b>Form:</b>             | liquid                                                                                                              |
| <b>Buffer:</b>           | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                             |
| <b>Storage:</b>          | Store at-20°C, and avoid repeat freeze-thaw cycles.                                                                 |



## Background:

Akt is a protein kinase consisting of three proteins (Akt1, Akt2 and Akt3) encoded by the AKT gene which is approximately 55 kDa. Akt is localized to the cytoplasm, nucleus and cell membrane and is involved pathways such as RET signalling, regulation of lipid metabolism, insulin signalling generic cascades, common cytokine receptor gamma-chain family signalling pathways and apoptotic pathways. Akt regulates proliferation, cell survival, growth, angiogenesis and tumor formation. This is mediated through serine and/or threonine phosphorylation of a range of downstream substrates. Akt1 and Akt2 are expressed in all human cell types and AKT 3 is highly expressed in brain, lung and kidney. Mutations in the AKT1 gene can result in breast cancer and colorectal cancer. AKT was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This primary antibody specifically binds to endogenous Akt protein which only binds about T308 when T308 is phosphorylated. Phospho-Akt (T308) polyclonal antibody detects endogenous levels of Akt protein only when phosphorylated at T308. 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.





Immunofluorescence analysis of human-lung tissue. 1, Akt (phospho Thr308) Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B