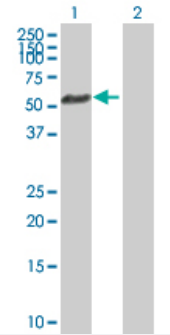
MaxPab®

# AKT1 purified MaxPab rabbit polyclonal antibody (D01P)

Catalog # H00000207-D01P Size 100 ug

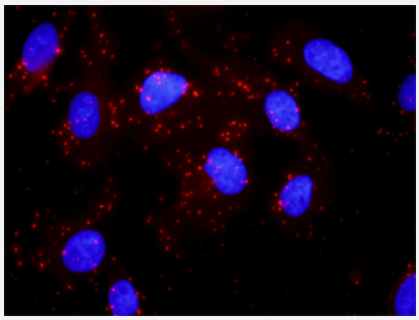
## Applications




### Western Blot (Transfected lysate)

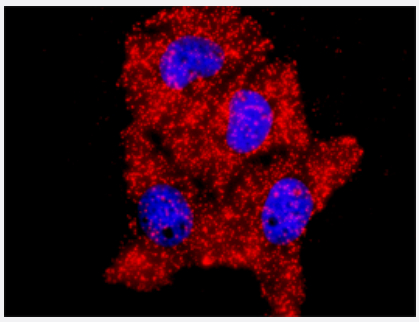
Western Blot analysis of AKT1 expression in transfected 293T cell line (H00000207-T01) by AKT1 MaxPab polyclonal antibody.

Lane 1: AKT1 transfected lysate(55.70 KDa).
Lane 2: Non-transfected lysate.



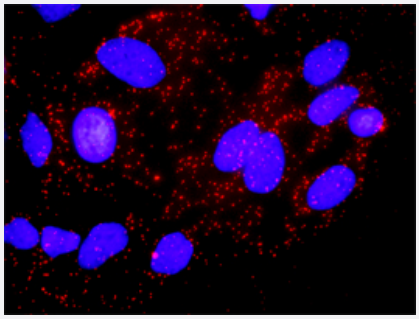
### *In situ* Proximity Ligation Assay (Cell)

Proximity Ligation Analysis of protein-protein interactions between AKT1 and HSPB1. Mahlavu cells were stained with anti-AKT1 rabbit purified polyclonal 1:1200 and anti-HSPB1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



### *In situ* Proximity Ligation Assay (Cell)

Proximity Ligation Analysis of protein-protein interactions between AKT1 and MAPK14. Huh7 cells were stained with anti-AKT1 rabbit purified polyclonal 1:1200 and anti-MAPK14 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



## *In situ* Proximity Ligation Assay (Cell)

Proximity Ligation Analysis of protein-protein interactions between AKT1 and CDKN1A. HeLa cells were stained with anti-AKT1 rabbit purified polyclonal 1:1200 and anti-CDKN1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

## Specification

| | |
|---|---|
| **Product Description** | Rabbit polyclonal antibody raised against a full-length human AKT1 protein. |
| **Immunogen** | AKT1 (AAH00479.1, 1 a.a. ~ 480 a.a) full-length human protein. |
| **Sequence** | MSDVAIVKEGWLHKRGEYIKTWRPRYFLLKNDGTFIGYKERPQDVDQREAPLNNFSVAQCQLMKT ERPRPNTFIIRCLQWTTVIERTFHVETPEEREEWTTAIQTVADGLKKQEEEEMDFRSGSPSDNSGA EEMEVSLAKPKHRVTMNEFEYLKLLGKGTFGKVILVKEKATGRYYAMKILKKEVIVAKDEVAHTLTE NRVLQNSRHPFLTALKYSFQTHDRLCFVMEYANGGELFFHLSRERVFSEDRARFYGAEIVSALDY LHSEKNVVYRDLKLENLMLDKDGHIKITDFGLCKEGIKDGATMKTFCGTPEYLAPEVLEDNDYGRA VDWWGLGVVMYEMMCGRLPFYNQDHEKLFELILMEEIRFPRTLGPEAKSLLSGLLKKDPKQRLG GGSEDAKEIMQHRFFAGIVWQHVYEKKLSPPFKPQVTSETDTRYFDEEFTAQMITITPPDQDDSM ECVDSERRPHFPQFSYSASGTA |
| **Host** | Rabbit |
| **Reactivity** | Human |
| **Interspecies Antigen Sequence** | Mouse (98); Rat (98) |
| **Quality Control Testing** | Antibody reactive against mammalian transfected lysate. |
| **Storage Buffer** | In 1x PBS, pH 7.4 |
| **Storage Instruction** | Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing. |

## Applications

- Western Blot (Transfected lysate)

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  Lane 1: AKT1 transfected lysate(55.70 KDa).
  Lane 2: Non-transfected lysate.

  Protocol Download

- *In situ* Proximity Ligation Assay (Cell)

  Proximity Ligation Analysis of protein-protein interactions between AKT1 and HSPB1. Mahlavu cells were stained with anti-AKT1 rabbit purified polyclonal 1:1200 and anti-HSPB1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

- *In situ* Proximity Ligation Assay (Cell)

  Proximity Ligation Analysis of protein-protein interactions between AKT1 and MAPK14. Huh7 cells were stained with anti-AKT1 rabbit purified polyclonal 1:1200 and anti-MAPK14 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

- *In situ* Proximity Ligation Assay (Cell)

  Proximity Ligation Analysis of protein-protein interactions between AKT1 and CDKN1A. HeLa cells were stained with anti-AKT1 rabbit purified polyclonal 1:1200 and anti-CDKN1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

## Gene Info — AKT1

| | |
|---|---|
| **Entrez GeneID** | 207 |
| **GeneBank Accession#** | NM_001014432 |
| **Protein Accession#** | AAH00479.1 |
| **Gene Name** | AKT1 |
| **Gene Alias** | AKT, MGC99656, PKB, PKB-ALPHA, PRKBA, RAC, RAC-ALPHA |
| **Gene Description** | v-akt murine thymoma viral oncogene homolog 1 |
| **Omim ID** | 164730 181500 |
| **Gene Ontology** | Hyperlink |

| | |
|---|---|
| **Gene Summary** | 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 phosphatidyl inositol 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. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq |
| **Other Designations** | RAC-alpha serine/threonine-protein kinase\|murine thymoma viral (v-akt) oncogene homolog-1\|protein kinase B\|rac protein kinase alpha |

## Publication Reference

- An analysis of protein-protein interactions in cross-talk pathways reveals CRKL as a novel prognostic marker in hepatocellular carcinoma.

  Liu CH, Chen TC, Chau GY, Jan YH, Chen CH, Hsu CN, Lin KT, Juang YL, Lu PJ, Cheng HC, Chen MH, Chang CF, Ting YS, Kao CY, Hsiao M, Huang CY.

  Molecular & Cellular Proteomics 2013 May; 12(5):1335.

  Application: Profiling, Human, Huh7 cells, Mahlavu cells

## Pathway

- Acute myeloid leukemia
- Adipocytokine signaling pathway
- Apoptosis
- B cell receptor signaling pathway
- Chemokine signaling pathway
- Chronic myeloid leukemia
- Colorectal cancer
- Endometrial cancer
- ErbB signaling pathway
- Fc epsilon RI signaling pathway
- Fc gamma R-mediated phagocytosis

- Focal adhesion
- Glioma
- Insulin signaling pathway
- Jak-STAT signaling pathway
- MAPK signaling pathway
- Melanoma
- mTOR signaling pathway
- Neurotrophin signaling pathway
- Non-small cell lung cancer
- Pancreatic cancer
- Pathways in cancer
- Prostate cancer
- Renal cell carcinoma
- Small cell lung cancer
- T cell receptor signaling pathway
- Tight junction
- Toll-like receptor signaling pathway
- VEGF signaling pathway

## Disease

- Adenocarcinoma
- Alzheimer disease
- Amphetamine-Related Disorders
- Atherosclerosis
- Basal Ganglia Diseases
- Bipolar Disorder

- Breast Neoplasms
- Calcinosis
- Carcinoma
- Cardiovascular Diseases
- Cognition
- Colonic Neoplasms
- Colorectal Neoplasms
- Coronary Artery Disease
- Depressive Disorder
- Diabetes Complications
- Diabetes Mellitus
- Disease Progression
- Disease Susceptibility
- Dominance
- Drug Toxicity
- Dyskinesia
- Edema
- Endometrial Neoplasms
- Endometriosis
- Esophageal Neoplasms
- Genetic Predisposition to Disease
- HIV Infections
- Leukemia
- Liver Cirrhosis
- Lung Neoplasms
- Memory

- Metabolic Syndrome X
- Necrosis
- Neoplasm Metastasis
- Neoplasm Recurrence
- Neoplasms
- Neuropsychological Tests
- Obesity
- Osteoporosis
- Ovarian Failure
- Ovarian Neoplasms
- Parkinson disease
- Polycystic Ovary Syndrome
- Precursor T-Cell Lymphoblastic Leukemia-Lymphoma
- Prostatic Neoplasms
- Psychiatric Status Rating Scales
- Psychoses
- Psychotic Disorders
- Puberty
- Pulmonary Disease
- Rectal Neoplasms
- Retinal Neoplasms
- Retinoblastoma
- Schizophrenia
- Space Perception
- Thrombophilia
- Thyroid Neoplasms

- Tobacco Use Disorder
- Tuberculosis
- Urinary Bladder Neoplasms
- Verbal Learning
- Werner syndrome