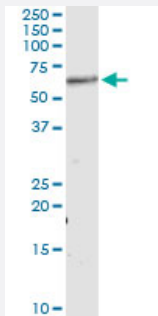


AKT1 monoclonal antibody (M01), clone 4C3

Catalog # H00000207-M01

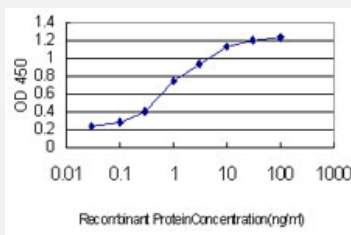
Size 100 ug

Applications



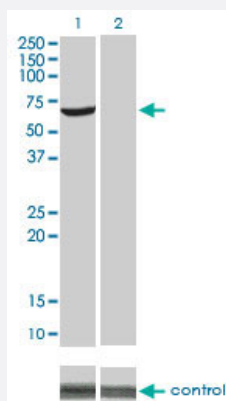
Immunoprecipitation

Immunoprecipitation of AKT1 transfected lysate using anti-AKT1 monoclonal antibody and Protein A Magnetic Bead, and immunoblotted with AKT1 MaxPab rabbit polyclonal antibody.



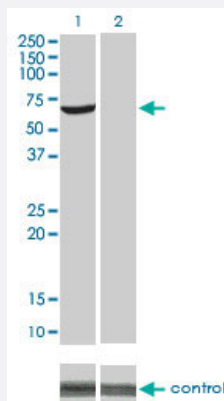
Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged AKT1 is approximately 0.03ng/ml as a capture antibody.



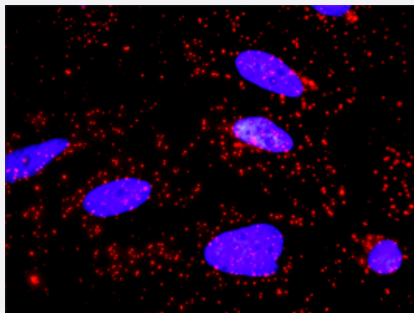
RNAi Knockdown (Antibody validated)

Western blot analysis of AKT1 over-expressed 293 cell line, cotransfected with AKT1 Validated Chimera RNAi (Cat # H00000207-R01V) (Lane 2) or non-transfected control (Lane 1). Blot probed with AKT1 monoclonal antibody (M01) clone 4C3 (Cat # H00000207-M01). GAPDH (36.1 kDa) used as specificity and loading control.



RNAi Knockdown (Antibody validated)

Western blot analysis of AKT1 over-expressed 293 cell line, cotransfected with AKT1 Validated Chimera RNAi (Cat # H00000207-R02V) (Lane 2) or non-transfected control (Lane 1). Blot probed with AKT1 monoclonal antibody (M01) clone 4C3 (Cat # H00000207-M01). GAPDH (36.1 kDa) used as specificity and loading control.



In situ Proximity Ligation Assay (Cell)

Proximity Ligation Analysis of protein-protein interactions between APPL1 and AKT1. HeLa cells were stained with anti-APPL1 rabbit purified polyclonal 1:1200 and anti-AKT1 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	Mouse monoclonal antibody raised against a partial recombinant AKT1.
Immunogen	AKT1 (AAH00479, 381 a.a. ~ 480 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	SGLLKKDPKQRLGGGSEDAKEIMQHRFFAGNWWQHVVYEKKLSPPFKPQVTSETDTRYFDEEFTA QMIIITPPDQDDSMCEVDSERRPHFPQFSYSASGTA
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (97); Rat (97)
Isotype	IgG2a Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein.
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Immunoprecipitation

Immunoprecipitation of AKT1 transfected lysate using anti-AKT1 monoclonal antibody and Protein A Magnetic Bead, and immunoblotted with AKT1 MaxPab rabbit polyclonal antibody.

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged AKT1 is approximately 0.03ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

- RNAi Knockdown (Antibody validated)

Western blot analysis of AKT1 over-expressed 293 cell line, cotransfected with AKT1 Validated Chimera RNAi (Cat # H00000207-R01V) (Lane 2) or non-transfected control (Lane 1). Blot probed with AKT1 monoclonal antibody (M01) clone 4C3 (Cat # H00000207-M01). GAPDH (36.1 kDa) used as specificity and loading control.

[Protocol Download](#)

- RNAi Knockdown (Antibody validated)

Western blot analysis of AKT1 over-expressed 293 cell line, cotransfected with AKT1 Validated Chimera RNAi (Cat # H00000207-R02V) (Lane 2) or non-transfected control (Lane 1). Blot probed with AKT1 monoclonal antibody (M01) clone 4C3 (Cat # H00000207-M01). GAPDH (36.1 kDa) used as specificity and loading control.

[Protocol Download](#)

- *In situ* Proximity Ligation Assay (Cell)

Proximity Ligation Analysis of protein-protein interactions between APPL1 and AKT1. HeLa cells were stained with anti-APPL1 rabbit purified polyclonal 1:1200 and anti-AKT1 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
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GeneBank Accession#	BC000479
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Protein Accession#	AAH00479
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Gene Name	AKT1
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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 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. 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

- [miR-21 regulates the proliferation and apoptosis of ovarian cancer cells through PTEN/PI3K/AKT.](#)

Liu HY, Zhang YY, Zhu BL, Feng FZ, Yan H, Zhang HY, Zhou B.

European Review for Medical and Pharmacological Sciences 2019 May; 23(10):4149.

Application: WB-Tr, Human, A2078, IOSE80, SKOV3 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](#)

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- [Alzheimer disease](#)
- [Amphetamine-Related Disorders](#)

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- [Basal Ganglia Diseases](#)
- [Bipolar Disorder](#)
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- [Calcinosis](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
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- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
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