

## **Product datasheet for CF500814**

# OriGene Technologies, Inc.

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### **AKT2 Mouse Monoclonal Antibody [Clone ID: OTI4H7]**

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI4H7

**Applications:** FC, IF, IHC, WB

**Recommended Dilution:** WB 1:1000, IHC 1:50, IF 1:50~100, FLOW 1:100

Reactivity: Human, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human AKT2 (NP\_001617) produced in HEK293T

cell

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

**Reconstitution Method:** For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Predicted Protein Size: 55.6 kDa

**Gene Name:** AKT serine/threonine kinase 2

Database Link: NP 001617

Entrez Gene 11652 MouseEntrez Gene 25233 RatEntrez Gene 208 Human

P31751



Synonyms:

### AKT2 Mouse Monoclonal Antibody [Clone ID: OTI4H7] - CF500814

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]

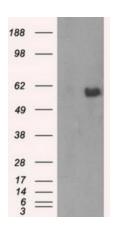
HIHGHH; PKBB; PKBBETA; PRKBB; RAC-BETA

**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase

**Protein Pathways:** Acute myeloid leukemia, Adipocytokine signaling pathway, Apoptosis, B cell receptor signaling

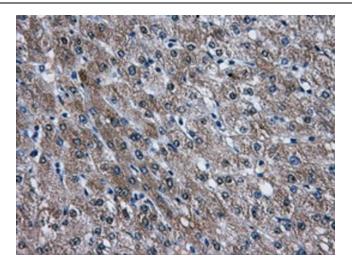
pathway, Chemokine signaling pathway, Chronic myeloid leukemia, Colorectal cancer, Endometrial cancer, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma Rmediated phagocytosis, Focal adhesion, Glioma, Insulin signaling pathway, Jak-STAT signaling pathway, MAPK signaling pathway, Melanoma, mTOR signaling pathway, Neurotrophin signaling pathway, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Progesterone-mediated oocyte maturation, Prostate cancer, Renal cell carcinoma, Small cell lung cancer, T cell receptor signaling pathway, Tight junction, Toll-like receptor signaling pathway, VEGF signaling pathway

### **Product images:**

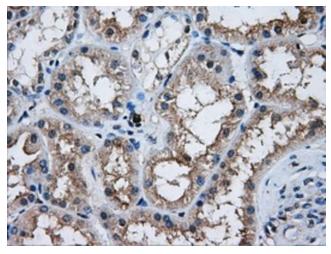


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY AKT2 (Cat# [RC217733], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-AKT2 (Cat# [TA500814]). Positive lysates [LY419836] (100ug) and [LC419836] (20ug) can be purchased separately from OriGene.

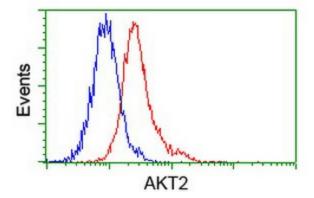




Immunohistochemical staining of paraffinembedded Human liver tissue within the normal limits using anti-AKT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

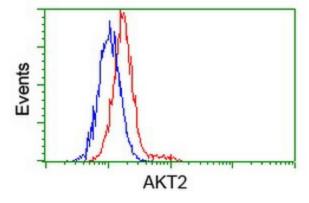


Immunohistochemical staining of paraffinembedded Human Kidney tissue within the normal limits using anti-AKT2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

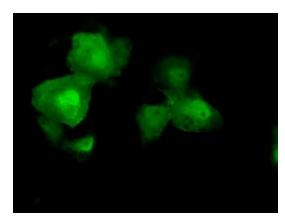


Flow cytometric Analysis of Jurkat cells, using anti-AKT2 antibody ([TA500814]), (Red), compared to a nonspecific negative control antibody, (Blue).

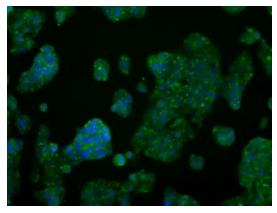




Flow cytometric Analysis of Hela cells, using anti-AKT2 antibody ([TA500814]), (Red), compared to a nonspecific negative control antibody, (Blue).

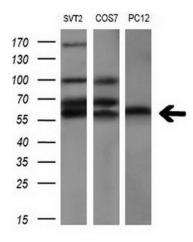


Anti-AKT2 mouse monoclonal antibody ([TA500814]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY AKT2 ([RC217733]).



Immunofluorescent staining of HepG2 cells using anti-AKT2 mouse monoclonal antibody ([TA500814]).





Western blot analysis of extracts (10ug) from 3 different cell lines by using anti-AKT2 monoclonal antibodyat 1:200 dilution.