

## DATASHEET

# AKT2 Mouse Monoclonal Antibody(C3764)

CAT. NO. AMA03376

### KEY FEATURES

Target	AKT2	Source / Host	Mouse
Reactivity	Human, Mouse, Rat	Clonality	Monoclonal
Applications	WB, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

### BACKGROUND

Serine/threonine kinase closely related to AKT1 and AKT3. All 3 enzymes, AKT1, AKT2 and AKT3, are collectively known as AKT kinase. AKT regulates many processes including metabolism, proliferation, cell survival, growth and angiogenesis, through the phosphorylation of a range of downstream substrates. Over 100 substrates have been reported so far, although for most of them, the precise AKT kinase catalyzing the reaction was not specified. AKT regulates glucose uptake by mediating insulin-induced translocation of the SLC2A4/GLUT4 glucose transporter to the cell surface. Phosphorylation of PTPN1 at 'Ser-50' negatively modulates its phosphatase activity preventing dephosphorylation of the insulin receptor and the attenuation of insulin signaling.

### APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
----	----------------

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

### PRODUCT OVERVIEW

Description	Mouse monoclonal antibody to AKT2
Specificity	Recognizes endogenous levels of AKT2 protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human AKT2. The exact sequence is proprietary.
Purification	This antibody is purified through a protein G column.
Molecular Weight	Predicted: 55 kD; Observed: 56 kD
Form/Buffer	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	RAC-beta serine/threonine-protein kinase; Protein kinase Akt-2; Protein kinase B beta; PKB beta; RAC-PK-beta
Gene Symbol	AKT2
Entrez Gene	208(Human); 11652(Mouse); 25233(Rat)
SwissProt	P31751(Human); Q60823(Mouse); P47197(Rat)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

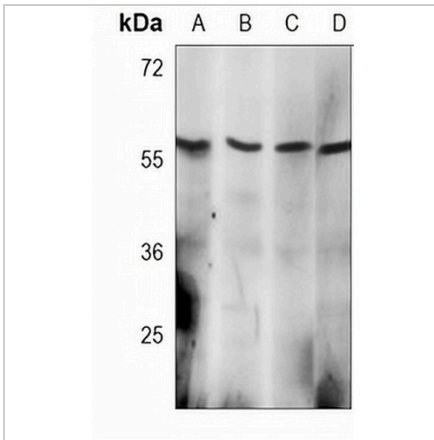
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

**DATASHEET**

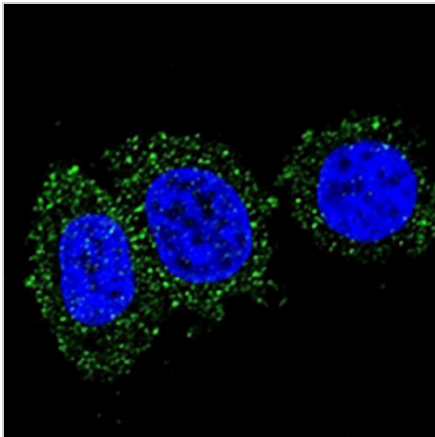
**AKT2 Mouse Monoclonal Antibody(C3764)**

CAT. NO. AMA03376

**DATA**



Western blot analysis of AKT2 expression in Jurkat (A), HeLa (B), mouse brain (C), C6 (D) whole cell lysates. (Predicted band size: 55 kD; Observed band size: 56 kD)



Immunofluorescent analysis of AKT2 staining in HeLa cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.