CELL APPLICATIONS, INC.

Akt3 Antibody

Cat. No. CP10250

Applications:	**WB, IP, IHC**
Detected MW:	**60 kDa**
Species & Reactivity:	**Human, Mouse, Rat**
Isotype:	**Mouse monoclonal IgG1**

BACKGROUND

AKT, also called protein kinase B (PKB), is a serine/threonine-specific protein kinase originally identified as the oncogene in the transforming retrovirus, AKT8. It plays an important role in mammalian cellular signaling.[1] In humans, the Akt family has three members: Akt1, Akt2, and Akt3. Akt1 is involved in cellular survival pathways by inhibiting apoptotic processes. Akt1 is also able to induce protein synthesis pathways, and is therefore a key signaling protein in the cellular pathways that lead to skeletal muscle hypertrophy and general tissue growth. Since Akt1 can block apoptosis, thereby promoting cell survival, it has been implicated as a major factor in many types of cancer.[2] Akt2 is an important signaling molecule in the insulin signaling pathway. It is required for induction of glucose transport.[3] The role of Akt3 is less clear, though it appears to be predominantly expressed in the brain. It has been reported that mice lacking Akt3 have small brains.[4]

References:

1. Chan T et al.: Annu. Rev. Biochem. 68:965-1014, 1999.
2. Bussink J et al.: Lancet Oncol. 9:288-296, 2008.
3. Ng Y et al.: Cell Metabolism, 7: 348-356, 2008.
4. Easton RM et al.: Mol Cell Biol. 25: 1869–1878, 2005.

TECHNICAL INFORMATION

Source:
Akt3 Antibody is a mouse monoclonal antibody raised against the purified recombinant human Akt3 protein expressed in *E. coli*.

Specificity and Sensitivity:
This monoclonal antibody detects endogenous levels of Akt3 proteins from cell lysates.

Storage Buffer: PBS and 30% glycerol

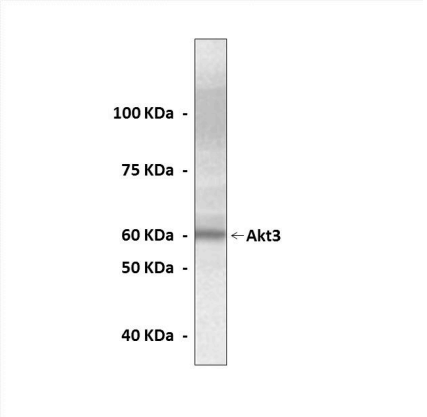
Storage:
Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

APPLICATIONS

Application:	*Dilution:
WB	1:1000
IP	1:50
IHC (Paraffin)	1:100
ICC	n/d
FACS	n/d

**Optimal dilutions must be determined by end user.*

QUALITY CONTROL DATA



Western Blot detection of Akt3 protein in human ovary carcinoma tissue lysate using Akt3 Antibody.