

## AKT2 Monoclonal Antibody

*V-Akt Murine Thymoma Viral Oncogene Homolog 2*

**CATALOG NO.:** 48-643

**HOST:** Mouse

**CLONALITY:** Monoclonal Clone 95C657.1.2.

**INFORMATION:**

Akt, protein kinase B (PKB), is a serine/threonine kinase, which is involved in many cellular signaling pathways and acts as a transducer of many functions initiated by growth factor receptors that activate phosphatidylinositol 3-kinase (PI 3-kinase). Akt2 is amplified and overexpressed in some human cancers. AKT2 encodes a RAC/AKT-type protein kinase that contains a N-terminal pleckstrin-homology (PH) domain and a central catalytic domain closely related to both cAMP-dependent protein kinase and protein kinase C. The protein is a member of PI3K-mediated signalling pathways associated with the regulation of proliferation, survival, protein synthesis, and metabolism. It is activated by a variety of growth factors. AKT2 has been shown to be transcriptionally regulated by MyoD and to activate MyoD-myocyte enhancer binding factor-2 (MEF2) transactivation activity during muscle differentiation. Glycogen synthase kinase 3 (GSK-3) also has been shown to be a downstream target of AKT2. The AKT2 gene is one of the human homologues of v-akt, the transduced oncogene of the AKT8 virus, which induces lymphomas in mice. It has been implicated in breast, ovarian, and pancreatic cancers.

**CONJUGATE:** none

**PHOSPHO-SPECIFIC:** no

**PURIFICATION:** Ascites

**ISOTYPE:** IgM

**IMMUNOGEN:** Antibody was raised against amino acids 106-123 of AKT2. (Human)

**SPECIES REACTIVITY:** H

**TESTED APPLICATION(S):** WB, IHC

**APPLICATION DETAILS:** AKT2 antibody can be used for detection of AKT2 by WB (1:500 - 1:1000), IHC-paraffin (1:50).

**BUFFER:** Antibody is supplied as Ascites fluid in PBS, 0.05% BSA, 0.05% sodium azide.

**FORMULATION:** Volume: 50 µl

**STORAGE:** AKT2 monoclonal antibody can be stored at -70°C for long term storage, and 4°C for short term storage.

**USER NOTES:**

When working with antibodies, optimal dilutions and concentrations should be determined by the end user for each application. The information is provided as a guideline only. As with all ProSci antibodies, this antibody is **for research use only**.