

## PRKAA1 Mouse Monoclonal

## **Antibody**

Background: The protein belongs to the ser/thr protein kinase family. It is the catalytic subunit of the

5'-prime-AMP-activated protein kinase (AMPK). AMPK is a cellular energy sensor conserved in all eukaryotic cells. The kinase activity of AMPK is activated by the stimuli that increase the cellular AMP/ATP ratio. AMPK regulates the activities of a number of key metabolic enzymes through phosphorylation. It protects cells from stresses that cause ATP depletion by switching off ATP-consuming biosynthetic pathways. Alternatively spliced transcript variants

encoding distinct isoforms have been observed.

Catalog Number: E10-30172

**Amount:** 100μg/100μl

Clone Number: 2B7

**Species:** Mouse IgG1 **MW:** 64kDa

Aliases: AMPK; AMPKa1; MGC33776; MGC57364; PRKAA1

Entrez Gene: 5562

Immunogen: Purified recombinant fragment of human PRKAA1 expressed in E. Coli.

**Storage:** Store at  $4^{\circ}$ C, for long term storage, store at  $-20^{\circ}$ C.

Formulation: Ascitic fluid containing 0.03% sodium azide.

Species Reactivities: Human; Monkey; Mouse; Rat

**Tested Applications:** WB, IHC, IF, FC, ELISA. Not yet tested in other applications.

Application notes: WB: 1/500 - 1/2000, IHC: 1/200-1/1000, IF: 1/200-1/1000, FC: 1/200-1/400,

ELISA: Propose dilution 1/10000.

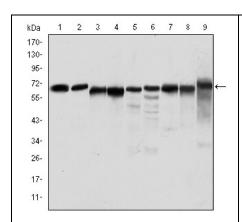


Figure 1: Western blot analysis using PRKAA1 mouse mAb against Jurkat (1), Hela (2), HepG2 (3), MCF-7 (4), Cos7 (5), NIH/3T3 (6), K562 (7), HEK293 (8), and PC-12 (9) cell lysate.

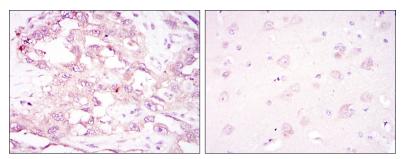


Figure 2: Immunohistochemical analysis of paraffin-embedded ovarian cancer (left) and brain tissues (right) using PRKAA1 mouse mAb with DAB staining.

