

AMPK α , Rabbit pAb

CATALOG #:	3113-100
AMOUNT:	100 μ g
LOT #:	_____
HOST (ISOTYPE):	Rabbit (Ig)
IMMUNOGEN:	KLH conjugated synthetic peptide corresponding to amino acid residues surrounding S487 of human PRKAA1.
SPECIES REACTIVITY:	Human
FORMULATION:	100 μ g (0.25 mg/ml) purified rabbit polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

STORAGE CONDITIONS:
Maintain refrigerated at 2-8°C for up to 6 months or -20°C for long term storage.

BACKGROUND DESCRIPTION:
AMPK α (PRKAA1) 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.

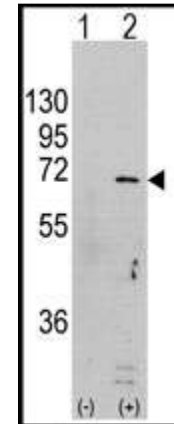
- BACKGROUND REFERENCES:**
1. Pang, T., J. Biol. Chem. 282 (1), 495-506 (2007)
 2. Crawford, R.M., Cell. Signal. 18 (10), 1595-1603 (2006)
 3. Crawford, R.M., Mol. Cell. Biol. 26 (15), 5921-5931 (2006)

OTHER NAMES:
Protein kinase, AMP-activated, alpha 1 catalytic subunit; AMPK alpha-1 chain

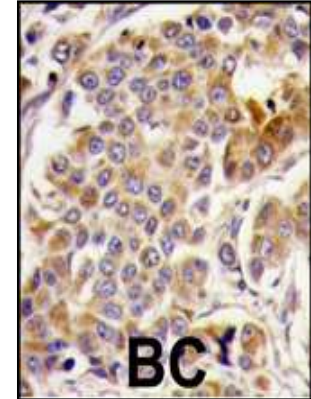
SPECIFICITY:
The antibody detects a ~64 kDa band, corresponding to the expected molecular mass of AMPK on immunoblots.

APPLICATION (suggested concentration):
The antibody can be used for ELISA (0.25 μ g/ml), Western blotting (2.5 – 5.0 μ g/ml), Immunohistochemistry (5-25 μ g/ml).

APPLICATION DATA (Calculated MW = 63878 Da):



Western blot analysis of AMPK α (arrow) using rabbit pAb (Cat#3113-100). 293 cell lysates (2 μ g/lane) either nontransfected (Lane 1) or transiently transfected with the PRKAA1 gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with PRKAA1-pS487, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining.

RELATED PRODUCTS:

- Apoptosis Detection Kits & Reagents
- Annexin V Kits & Bulk Reagents
 - Caspase Assay Kits & Reagents
 - Mitochondrial Apoptosis Kits & Reagents
 - Nuclear Apoptosis Kits & Reagents
 - Apoptosis Inducers and Set
 - Apoptosis siRNA Vectors
- Cell Fractionation System
- Mitochondria/Cytosol Fractionation Kit
 - Nuclear/Cytosol Fractionation Kit
 - Membrane Protein Extraction Kit
 - Cytosol/Particulate Rapid Separation Kit
 - Mammalian Cell Extraction Kit
 - FractionPREP Fractionation System