

Anti-AMPK Beta 2 Picoband Antibody

Catalog # ABO12425

Product Information

Application	WB, IHC-P
Primary Accession	O43741
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for 5'-AMP-activated protein kinase subunit beta-2(PRKAB2) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	5565
Other Names	5'-AMP-activated protein kinase subunit beta-2, AMPK subunit beta-2, PRKAB2
Calculated MW	30302
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 µg/ml, Human, Rat
Source	Eukaryota
Protein Name	5'-AMP-activated protein kinase subunit beta-2
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human AMPK beta 2 (56-89aa DKEFVSWQQDLEDSVKPTQQARPTVIRWSEGGKE), different from the related mouse sequence by three amino acids, and from the related rat sequence by two amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

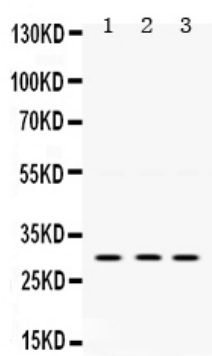
Protein Information

Name	PRKAB2
Function	Non-catalytic subunit of AMP-activated protein kinase (AMPK), an energy sensor protein kinase that plays a key role in regulating cellular energy metabolism. In response to reduction of intracellular ATP levels, AMPK activates energy-producing pathways and inhibits energy-consuming processes: inhibits protein, carbohydrate and lipid biosynthesis, as well as cell growth and proliferation. AMPK acts via direct phosphorylation of metabolic enzymes, and by longer-term effects via phosphorylation of transcription regulators. Also acts as a regulator of cellular polarity by remodeling the actin cytoskeleton; probably by indirectly activating myosin. Beta non-catalytic subunit acts as a scaffold on which the AMPK complex assembles, via its C-terminus that bridges alpha (PRKAA1 or PRKAA2) and gamma subunits (PRKAG1, PRKAG2 or PRKAG3).

Background

5'-AMP-activated protein kinase subunit beta-2 is an enzyme that in humans is encoded by the PRKAB2 gene. The protein encoded by this gene is a regulatory subunit of the AMP-activated protein kinase (AMPK). AMPK is a heterotrimer consisting of an alpha catalytic subunit, and non-catalytic beta and gamma subunits. It is an important energy-sensing enzyme that monitors cellular energy status. In response to cellular metabolic stresses, AMPK is activated, and thus phosphorylates and inactivates acetyl-CoA carboxylase (ACC) and beta-hydroxy beta-methylglutaryl-CoA reductase (HMGCR), key enzymes involved in regulating de novo biosynthesis of fatty acid and cholesterol. This subunit may be a positive regulator of AMPK activity. It is highly expressed in skeletal muscle and thus may have tissue-specific roles. Multiple alternatively spliced transcript variants have been found for this gene.

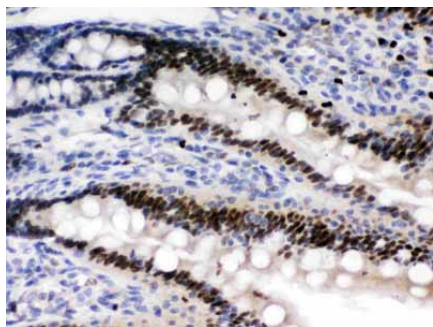
Images



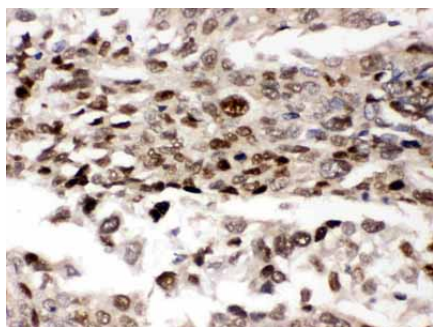
Anti- AMPK beta 2 Picoband antibody, ABO12425,
Western blotting All lanes: Anti AMPK beta 2 (ABO12425)
at 0.5ug/mL Lane 1: Rat Brain Tissue Lysate at 50ug Lane 2:
Rat Skeletal Muscle Tissue Lysate at 50ug Lane 3: PANC
Whole Cell Lysate at 40ug Predicted bind size:
30KD Observed bind size: 30KD



Anti- AMPK beta 2 Picoband antibody, ABO12425,
IHC(P) IHC(P): Mouse Intestine Tissue



Anti- AMPK beta 2 Picoband antibody, ABO12425,
IHC(P)IHC(P): Rat Intestine Tissue



Anti- AMPK beta 2 Picoband antibody, ABO12425,
IHC(P)IHC(P): Human Lung Cancer Tissue

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.