

Anti-AMPK beta 1 (pS182) Antibody

Rabbit polyclonal antibody to AMPK beta 1 (pS182) Catalog # AP59667

Specification

Anti-AMPK beta 1 (pS182) Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB <u>O9Y478</u> <u>O9R078</u> Human, Mouse, Rat, Pig, Bovine Rabbit Polyclonal 30382

Anti-AMPK beta 1 (pS182) Antibody - Additional Information

Gene ID 5564

Other Names AMPK; 5'-AMP-activated protein kinase subunit beta-1; AMPK subunit beta-1; AMPKb

Target/Specificity Recognizes endogenous levels of AMPK beta 1 (pS182) protein.

Dilution WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200)

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

Anti-AMPK beta 1 (pS182) Antibody - Protein Information

Name PRKAB1

Synonyms AMPK

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.



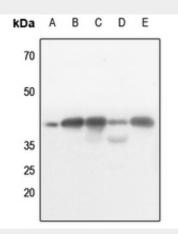
Beta non-catalytic subunit acts as a scaffold on which the AMPK complex assembles, via its Cterminus that bridges alpha (PRKAA1 or PRKAA2) and gamma subunits (PRKAG1, PRKAG2 or PRKAG3).

Anti-AMPK beta 1 (pS182) Antibody - Protocols

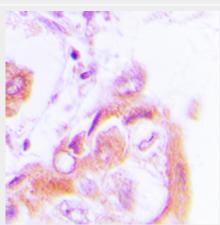
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- <u>Flow Cytomety</u>
- <u>Cell Culture</u>

Anti-AMPK beta 1 (pS182) Antibody - Images



Western blot analysis of AMPK beta 1 (pS182) expression in Hela (A), mouse lung (B), mouse spleen (C), mouse kidney (D), rat spleen (E) whole cell lysates.



Immunohistochemical analysis of AMPK beta 1 (pS182) staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was



used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-AMPK beta 1 (pS182) Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human AMPK beta 1. The exact sequence is proprietary.