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Anti-AMPK beta 1 (pS182) Antibody

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

Product Information

Application	WB, IHC
Primary Accession	Q9Y478
Other Accession	Q9R078
Reactivity	Human, Mouse, Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	30382

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

Protein Information

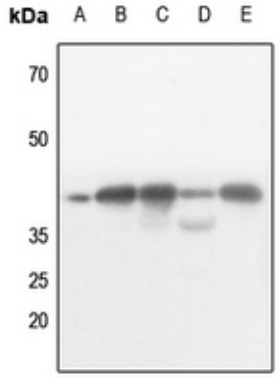
Name	PRKAB1
Synonyms	AMPK
Function	Non-catalytic subunit of AMP-activated protein kinase (AMPK), an energy sensor protein kinase that plays a key role in regulating cellular energy metabolism. In response to reduction of intracellular ATP levels, AMPK activates energy-producing pathways and inhibits 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 C-terminus that bridges alpha (PRKAA1 or PRKAA2) and gamma subunits

(PRKAG1, PRKAG2 or PRKAG3).

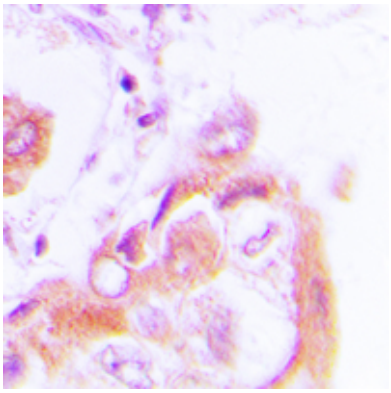
Background

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

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.