



Anti-PRKAB1 monoclonal antibody, clone Z478 (DCABH-8535)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Rabbit monoclonal to AMPK beta 1
Antigen Description	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).
Specificity	This antibody is specific for human AMPK beta 1.
Immunogen	Synthetic peptide corresponding to residues in Human AMPK beta 1.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Mouse, Rat, Human
Clone	Z478
Purity	IgG fraction
Conjugate	Unconjugated
Applications	WB, IHC-P, Flow Cyt, IP

Positive Control	NIH 3T3, Hela, A431 and PC12 cell lysates. Human lung carcinoma tissue.
Format	Liquid
Size	100 µl
Buffer	PBS 49%,Sodium azide 0.01%,Glycerol 50%,BSA 0.05%
Storage	store at -20°C. Avoid freeze / thaw cycles.
Ship	Shipped at 4°C.

GENE INFORMATION

Gene Name	PRKAB1 protein kinase, AMP-activated, beta 1 non-catalytic subunit [Homo sapiens]
Official Symbol	PRKAB1
Synonyms	PRKAB1; protein kinase, AMP-activated, beta 1 non-catalytic subunit; 5-AMP-activated protein kinase subunit beta-1; AMPK beta 1; AMPKb; AMPK beta -1 chain; AMPK subunit beta-1; AMP-activated protein kinase beta subunit; 5-AMP-activated protein kinase beta
Entrez Gene ID	5564
Protein Refseq	NP_006244
UniProt ID	A0A024RBN1
Chromosome Location	12q24.1-q24.3
Pathway	AMPK signaling, organism-specific biosystem; Adipocytokine signaling pathway, organism-specific biosystem; Adipocytokine signaling pathway, conserved biosystem; Direct p53 effectors, organism-specific biosystem; Energy Metabolism, organism-specific biosystem; Energy dependent regulation of mTOR by LKB1-AMPK, organism-specific biosystem; Hypertrophic cardiomyopathy (HCM), organism-specific biosystem;
Function	AMP-activated protein kinase activity; protein binding; protein kinase binding;