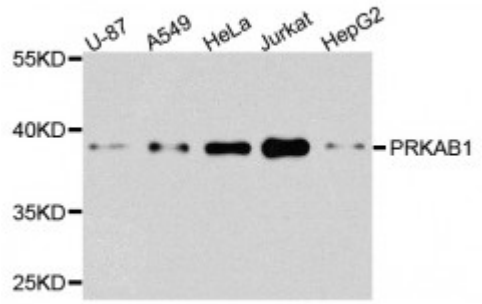
Anti-PRKAB1 Antibody



Description	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. AMPK 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. The myristoylation and phosphorylation of this subunit have been shown to affect the enzyme activity and cellular localization of AMPK. This subunit may also serve as an adaptor molecule mediating the association of the AMPK complex.

Model	STJ114365
Host	Rabbit
Reactivity	Human
Applications	IHC, WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 1-80 of human PRKAB1 (NP_006244.2).
Gene ID	5564
Gene Symbol	PRKAB1
Dilution range	WB 1:500 - 1:2000 IHC 1:50 - 1:200
Purification	Affinity purification

Note	For Research Use Only (RUO).
Protein Name	5'-AMP-activated protein kinase subunit beta-1 AMPK subunit beta-1 AMPKb
Molecular Weight	30.382 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:9378OMIM:602740Reactome:R-HSA-1445148
Alternative Names	5'-AMP-activated protein kinase subunit beta-1 AMPK subunit beta-1 AMPKb
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
Post-translational Modifications	Phosphorylated when associated with the catalytic subunit (PRKAA1 or PRKAA2), Phosphorylated by ULK1