

AMPK β 1 (phospho Ser182) Polyclonal Antibody

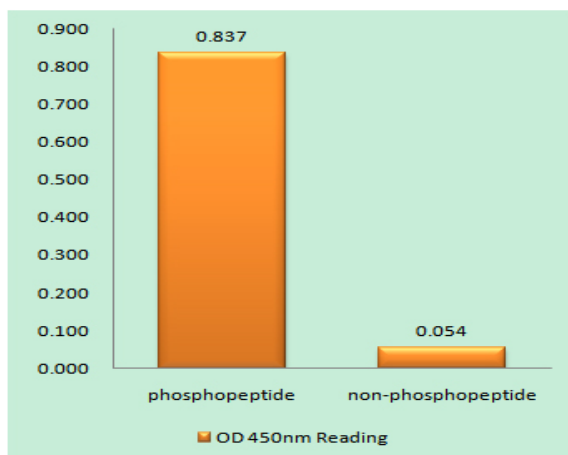
Catalog No :	YP0714
Reactivity :	Human;Mouse;Rat;Monkey
Applications :	WB;IHC;IF;ELISA
Target :	AMPK β 1
Fields :	>>FoxO signaling pathway;>>AMPK signaling pathway;>>Longevity regulating pathway;>>Longevity regulating pathway - multiple species;>>Apelin signaling pathway;>>Tight junction;>>Circadian rhythm;>>Thermogenesis;>>Insulin signaling pathway;>>Adipocytokine signaling pathway;>>Oxytocin signaling pathway;>>Glucagon signaling pathway;>>Insulin resistance;>>Non-alcoholic fatty liver disease;>>Alcoholic liver disease;>>Hypertrophic cardiomyopathy
Gene Name :	PRKAB1
Protein Name :	5'-AMP-activated protein kinase subunit beta-1
Human Gene Id :	5564
Human Swiss Prot No :	Q9Y478
Mouse Gene Id :	19079
Mouse Swiss Prot No :	Q9R078
Rat Gene Id :	83803
Rat Swiss Prot No :	P80386
Immunogen :	The antiserum was produced against synthesized peptide derived from human AMPK beta1 around the phosphorylation site of Ser181. AA range:147-196
Specificity :	Phospho-AMPK β 1 (S182) Polyclonal Antibody detects endogenous levels of AMPK β 1 protein only when phosphorylated at S182.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	33kD
Cell Pathway :	AMPK
Background :	<p>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. [provided</p>
Function :	<p>function:AMPK is responsible for the regulation of fatty acid synthesis by phosphorylation of acetyl-CoA carboxylase. Also regulates cholesterol synthesis via phosphorylation and inactivation of hydroxymethylglutaryl-CoA reductase and hormone-sensitive lipase. This is a regulatory subunit, may be a positive regulator of AMPK activity. It may also serve as an adaptor molecule for the catalytic alpha-subunit.,PTM:Phosphorylated.,similarity:Belongs to the 5'-AMP-activated protein kinase beta subunit family.,subunit:Heterotrimer of an alpha catalytic subunit, a beta and a gamma non-catalytic regulatory subunits. Interacts with FNIP1 and FNIP2.,</p>
Subcellular Location :	nucleus,nucleoplasm,cytosol,nucleotide-activated protein kinase complex,
Expression :	Brain,Lung,Muscle,Platelet,
Sort :	1985
No4 :	1

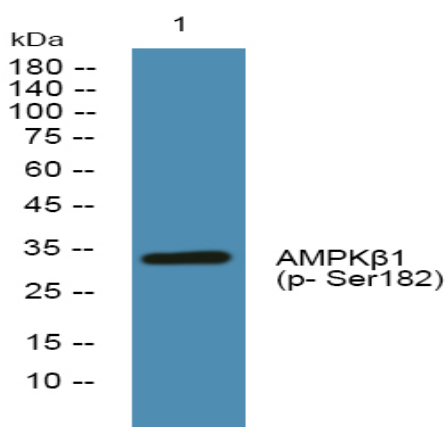
Host : Rabbit

Modifications : Phospho

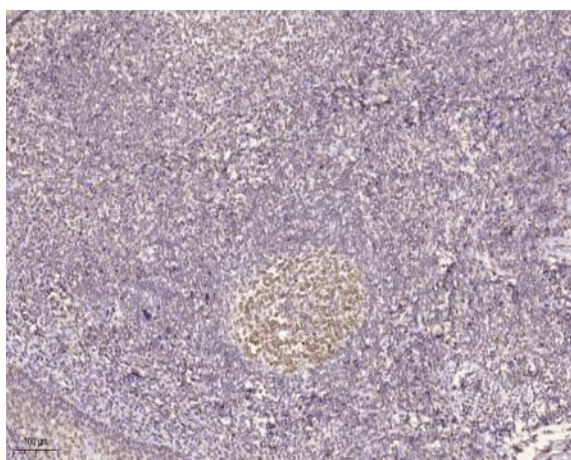
Products Images



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using AMPK beta1 (Phospho-Ser181) Antibody



Western blot analysis of lysates from SH-SY5Y cells, primary antibody was diluted at 1:1000, 4° over night



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Tris-EDTA, pH9.0 was used for antigen retrieval. 2 Antibody was diluted at 1:200(4° overnight).3, Secondary antibody was diluted at 1:200(room temperature, 45min).