

AMPK β 1 (phospho Ser182) rabbit pAb**Cat#: orb764134 (Manual)**

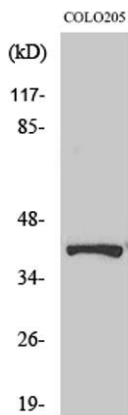
For research use only. Not intended for diagnostic use.

Product Name	AMPK β 1 (phospho Ser182) rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse;Rat
Recommended dilutions	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.
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..
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	5'-AMP-activated protein kinase subunit beta-1
Gene Name	PRKAB1
Cellular localization	nucleus,nucleoplasm,cytosol,nucleotide-activated protein kinase complex,
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal

Concentration	1 mg/ml
Observed band	38kD
Human Gene ID	5564
Human Swiss-Prot Number	Q9Y478
Alternative Names	PRKAB1; AMPK; 5'-AMP-activated protein kinase subunit beta-1; AMPK subunit beta-1; AMPKb

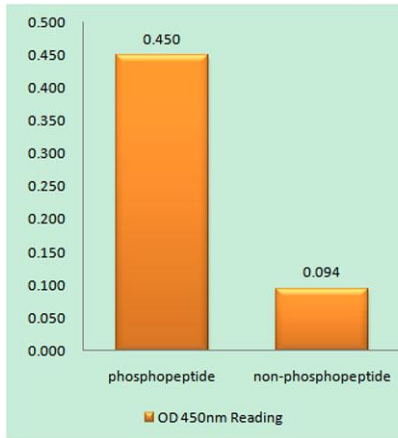
Background

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]

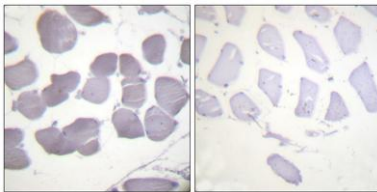


Western Blot analysis of various cells using Phospho-AMPKβ1 (S182) Polyclonal Antibody cells nucleus extracted by Minute™ Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA).

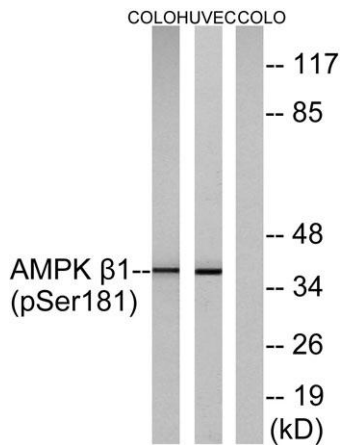
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Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using AMPK beta1 (Phospho-Ser181) Antibody



Immunohistochemistry analysis of paraffin-embedded human skeletal muscle, using AMPK beta1 (Phospho-Ser181) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from COLO205 cells and HUVEC cells, using AMPK beta1 (Phospho-Ser181) Antibody. The lane on the right is blocked with the phospho peptide.