Anti-Phospho-AMPK alpha 1/2 (Thr183/Thr172) Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R016077

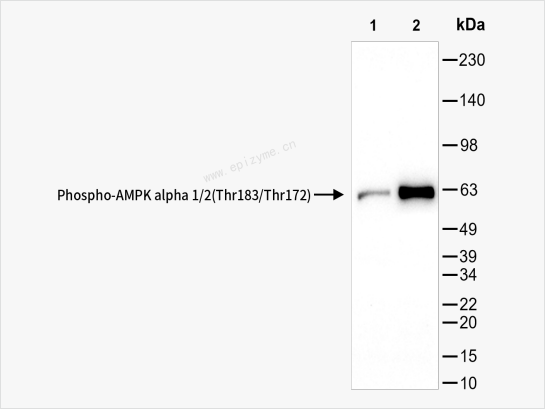
Product Information

Application	WB, ELISA
Reactivity	Human
Dilution	WB 1:1,000~1:2,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	14G44B99
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human AMPK alpha
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Phospho-AMPK alpha 1/2 (Thr183/Thr172) Rabbit mAb [14G44B99] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	PRKAA1 | AMPK alpha-1 (p-T172); p-AMPK alpha-1; phospho-AMPK alpha-1; AMPKalpha1; C130083N04Rik; AAPK1_MOUSE; Prkaa1; AMPK subunit alpha-1; Acetyl-CoA carboxylase kinase (ACACA kinase); Hydroxymethylglutaryl-CoA reductase kinase (HMGCR kinase); Tau-protein kinase PRKAA1; 2.7.11.1; AAPK1_RAT; Ampk1; AMPK; AMPK alpha 1; AMPKa1.
Calculated MW	Calculated MW: 62 kDa; Observed MW: 62 kDa
Uniprot ID	Q13131, P54646
Gene ID	5562, 5563
Background	The protein encoded by this gene belongs to the ser/thrprotein kinase family. It is the catalytic subunit of the5'-prime-AMP-activated protein kinase (AMPK). AMPK is a cellularenergy sensor conserved in all eukaryotic cells. The kinaseactivity of AMPK is activated by the stimuli that increase thecellular AMP/ATP ratio. AMPK regulates the activities of a numberof key metabolic enzymes through phosphorylation. It protects cellsfrom stresses that cause ATP depletion by switching offATP-consuming biosynthetic pathways. Alternatively splicedtranscript variants encoding distinct isoforms have been observed. [provided by RefSeq, Jul 2008]. The protein encoded by this gene is a catalytic subunit ofthe AMP-activated protein kinase (AMPK). AMPK is a heterotrimerconsisting of an alpha catalytic subunit, and non-catalytic betaand gamma subunits. AMPK is an important energy-sensing enzyme thatmonitors cellular energy status. In response to cellular metabolicstresses, AMPK is activated, and thus phosphorylates andinactivates acetyl-CoA carboxylase (ACC) and beta-hydroxybeta-methylglutaryl-CoA reductase (HMGCR), key enzymes involved inregulating de novo biosynthesis of fatty acid and cholesterol.Studies of the mouse

Validation Images



Western Blot - Anti-Phospho-AMPK alpha 1/2 (Thr183/Thr172) Rabbit mAb [14G44B99]
All lanes: R016077 at 1:1,000 dilution
Lane 1: Untreated THP-1 (Human hepatocarcinoma epithelial cell) whole cell lysates
Lane 2: THP-1treated with 10nM insulin for 15min
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 62 kDa
Observed band size: 62 kDa
Developed using the ECL technique (Cat. No. SQ201).