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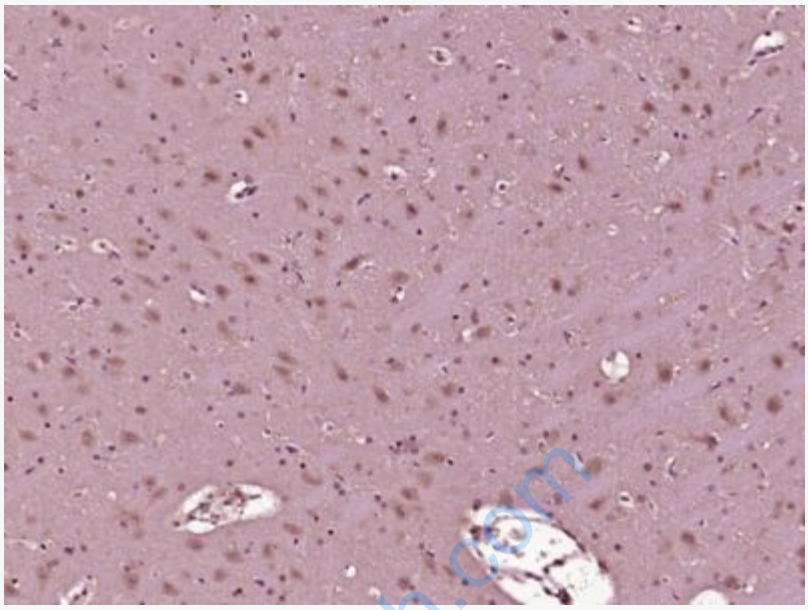
Rabbit Anti-phospho-AMPK beta 1 + AMPK beta 2 (Ser182/Ser184) antibody

SL3027R

Product Name:	phospho-AMPK beta 1 + AMPK beta 2 (Ser182/Ser184)
Chinese Name:	磷酸化腺苷单磷酸活化蛋白激酶β1抗体
Alias:	phospho-AMPK beta 1 + AMPK beta 2 (Ser182+Ser184); PRKAB1(phospho S182); PRKAB1(phospho-S182); AMPK beta 1(phospho Ser182); p-AMPK beta 1(Ser182); p-AMPK beta 1(S182); AMPK beta 2(phospho Ser184); 5 AMP activated protein kinase subunit beta 1; AMPK; AMPK beta 1 chain; AMPKb; HAMPKb; PRKAB1; 5'-AMP-activated protein kinase subunit beta-1; AMP-activated protein kinase beta subunit; protein kinase, AMP-activated, noncatalytic, beta-1; AMPK beta -1 chain; 5'-AMP-activated protein kinase beta-1 subunit; AMPKb; AMPK subunit beta-1; AAKB1_HUMAN; AMPK b1; AMPK-b1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Cow,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	30kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human AMPK beta 1 around the phosphorylation site of Ser182:SS(p-S)PP
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized

	antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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 by RefSeq, Jul 2008]. **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; 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). **Subunit:** AMPK is a heterotrimer of an alpha catalytic subunit (PRKAA1 or PRKAA2), a beta (PRKAB1 or PRKAB2) and a gamma non-catalytic subunits (PRKAG1, PRKAG2 or PRKAG3). Interacts with FNIP1 and FNIP2. **Tissue Specificity:** Highly expressed in kidney, heart, white adipose tissue, lung and spleen. **Post-translational modifications:** Phosphorylated when associated with the catalytic subunit (PRKAA1 or PRKAA2). Phosphorylated by ULK1; leading to negatively regulate AMPK activity and suggesting the existence of a regulatory feedback loop between ULK1 and AMPK. **Similarity:** Belongs to the 5'-AMP-activated protein kinase beta subunit family. **SWISS:**

	Q9Y478 **Gene ID:** 5564 **Database links:** Entrez Gene: 5564 Human Entrez Gene: 19079 Mouse Entrez Gene: 83803 Rat Omim: 602740 Human SwissProt: Q9Y478 Human SwissProt: Q9R078 Mouse SwissProt: P80386 Rat Unigene: 6061 Human Unigene: 726001 Human Unigene: 458152 Mouse Unigene: 3619 Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. AMPKβ1(AMP-activated Protein Kinase beta-1)(腺苷单磷酸活化蛋白激酶β-1)是一种参与细胞适应能量危机的应激反应酶,AMPK不仅可以在细胞水平作为能量的感受器，还可以通过激素和cell factor，如瘦素、脂联素和ghrelin来参与调节机体的能量消耗和能量摄入.

Picture:	 Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (phospho-AMPK beta 1 + AMPK beta 2 (Ser182/Ser184)) Polyclonal Antibody, Unconjugated (SL3027R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.