

Product datasheet for TA347027

AMPK beta 1 (PRKAB1) Mouse Monoclonal Antibody [Clone ID: 1A7-E11-E9]

Product data:

Product Type:	Primary Antibodies
Clone Name:	1A7-E11-E9
Applications:	IF, IHC, IP, WB
Recommend Dilution:	WB: 1:1000, IF: 1:100
Reactivity:	Human, Monkey, Mouse, Rat
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	The immunogen for PRKAB1 antibody: purified recombinant human AMPK beta 1 protein fragments expressed in E.coli.
Formulation:	Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.02% sodium azide and 50% glycerol.
Purification:	Affinity purified
Predicted Protein Size:	38 kDa
Gene Name:	protein kinase AMP-activated non-catalytic subunit beta 1
Database Link:	NP_006244 Entrez Gene 19079 Mouse Entrez Gene 83803 Rat Entrez Gene 695737 Monkey Entrez Gene 5564 Human
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 by RefSeq, Jul 2008]
Synonyms:	AMPK; HAMPKb

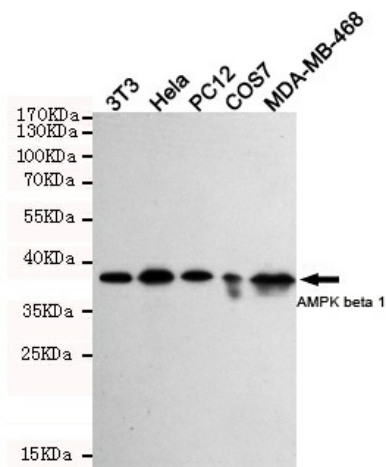


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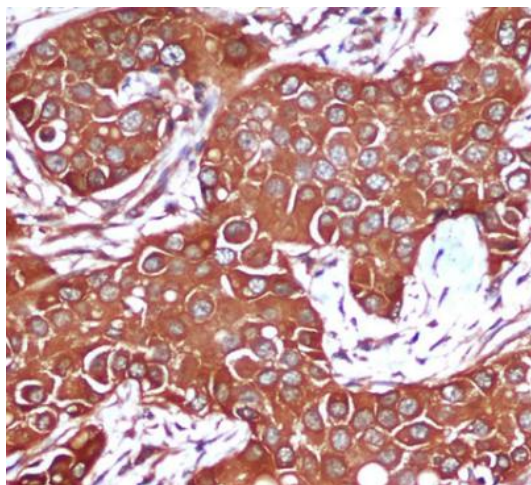
Protein Families: Druggable Genome

Protein Pathways: Adipocytokine signaling pathway, Hypertrophic cardiomyopathy (HCM), Insulin signaling pathway

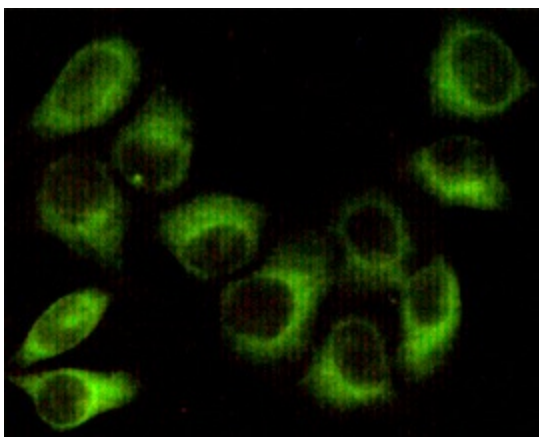
Product images:



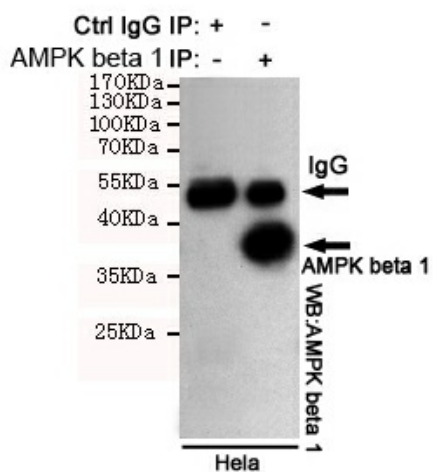
Western blot detection of AMPK beta 1 in 3T3, HeLa, PC-12, COS7 and MDA-MB-468 cell lysates using AMPK beta 1 mouse mAb (1:1000 diluted). Predicted band size: 38 kDa. Observed band size: 38 kDa. Exposure time: 5 min.



Immunohistochemical analysis of paraffin-embedded Breast cancer using AMPK beta 1 mouse mAb (1/200 dilution). Antigen retrieval was performed by pressure cooking in citrate buffer (pH 6.0).



Immunocytochemistry staining of HeLa cells fixed with 1% Paraformaldehyde and using AMPK beta 1 mouse mAb (dilution 1:100).



Immunoprecipitation analysis of HeLa cell lysates using AMPK beta 1 mouse mAb.