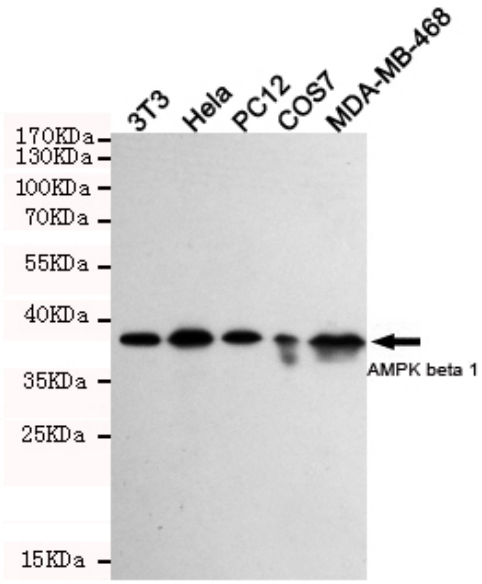
AMPKβ 1 mouse mAb

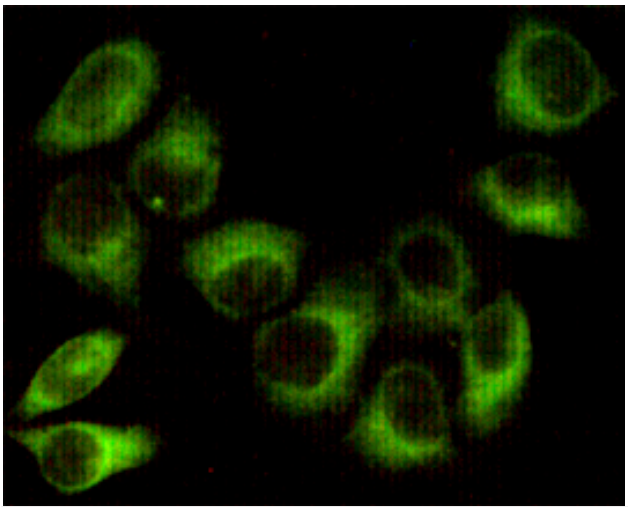
Catalog No	YP-Ab-14231
Isotype	IgG
Reactivity	Human;Mouse;Rat;Monkey
Applications	WB;ICC;IP;IHC
Gene Name	prkab1
Protein Name	
Immunogen	Purified recombinant human AMPK beta 1 protein fragments expressed in E.coli.
Specificity	This antibody detects endogenous levels of AMPK beta 1 and does not cross-react with related proteins.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Dilution	wb 1:1000 icc 1:100
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	1300015D22Rik;5 AMP activated protein kinase subunit beta 1;5"-AMP-activated protein kinase subunit beta-1;AAKB1_HUMAN;AMP-ACTIVATED PROTEIN KINASE, NONCATALYTIC, BETA-1; AMP-activated, noncatalytic, beta-1;AMPK;AMPK beta 1 chain;AMPK subunit beta-1;AMPK-BETA-1;AMPKb;AU021155;E430008F22;HAMPKb;MGC17785;PRKAB1.
Observed Band	38kD
Cell Pathway	nucleus,nucleoplasm,cytosol,nucleotide-activated protein kinase complex,
Tissue Specificity	Brain,Lung,Muscle,Platelet,
Function	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.,

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
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

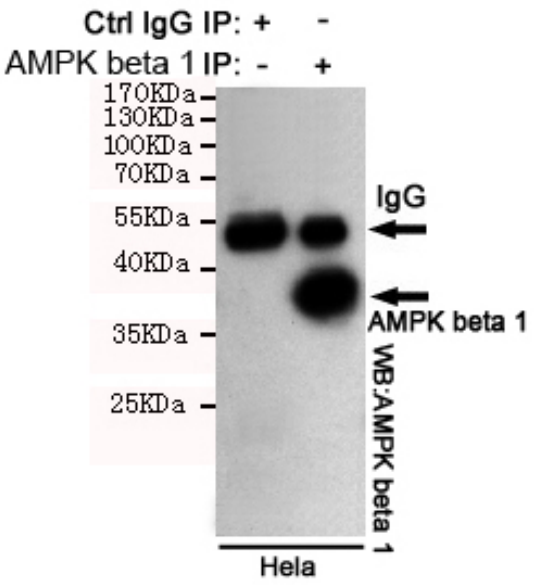
Products Images



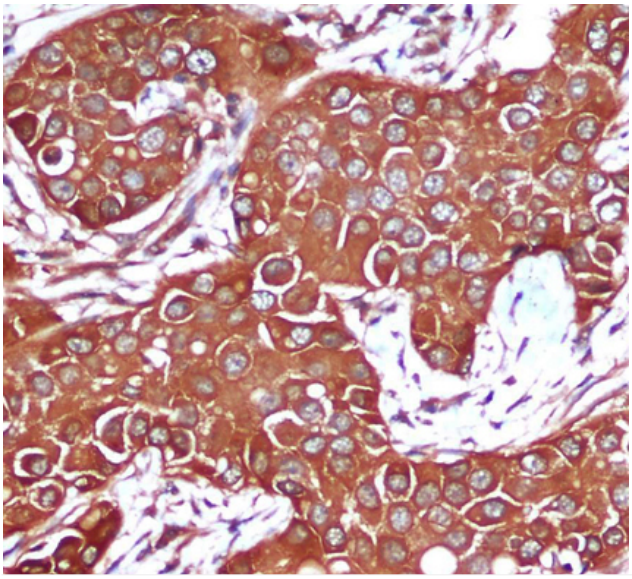
Western blot detection of AMPK beta 1 in 3T3,Hela,PC-12,COS7 and MDA-MB-468 cell lysates using AMPK beta 1 mouse mAb (1:1000 diluted).Predicted band size:38KDa.Observed band size:38KDa.Exposure time:5min.



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.



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).