

## AMPK beta 1 Conjugated Antibody

Catalog No: #C49168



Package Size: #C49168-AF350 100ul #C49168-AF405 100ul #C49168-AF488 100ul  
 #C49168-AF555 100ul #C49168-AF594 100ul #C49168-AF647 100ul  
 #C49168-AF680 100ul #C49168-AF750 100ul #C49168-Biotin 100ul

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## Description

Product Name	AMPK beta 1 Conjugated Antibody
Host Species	Rabbit
Clonality	Monoclonal
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	1300015D22Rik antibody 5"-AMP-activated protein kinase subunit beta-1 antibody 5'-AMP-activated protein kinase beta-1 subunit antibody AAKB1_HUMAN antibody AMP-activated protein kinase beta subunit antibody AMP-ACTIVATED PROTEIN KINASE, NONCATALYTIC, BETA-1 antibody AMP-activated, noncatalytic, beta-1 antibody AMPK antibody AMPK beta 1 chain antibody AMPK subunit beta-1 antibody AMPK-BETA-1 antibody AMPKb antibody AU021155 antibody E430008F22 antibody HAMPKb antibody MGC17785 antibody PRKAB1 antibody Protein kinase AMP activated non catalytic subunit beta 1 antibody protein kinase, AMP-activated, beta 1 non-catalytic subunit antibody protein kinase, AMP-activated, noncatalytic, beta-1 antibody
Accession No.	Swiss-Prot#:Q9Y478
Uniprot	Q9Y478
GeneID	5564;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Calculated MW	38 kDa
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

## Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

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## Background

AMPK (for 5'-AMP-activated protein kinase) is a heterotrimeric complex comprising a catalytic  $\alpha$  subunit and regulatory  $\beta$  and  $\gamma$  subunits. It protects cells from stresses that cause ATP depletion by switching off ATP-consuming bio-synthetic pathways. AMPK is activated by high AMP and low ATP through a mechanism involving allosteric regulation, promotion of phosphorylation by an upstream protein kinase known as AMPK kinase, and inhibition of dephosphorylation. Activated AMPK can phosphorylate and regulate in vivo hydroxy-methylglutaryl-CoA reductase and acetyl-CoA carboxylase, which are key regulatory enzymes of sterol synthesis and fatty acid synthesis, respectively. The human AMPK $\alpha$ 1 and AMPK $\alpha$ 2 genes encode 548 amino acid and 552 amino acid proteins, respectively. Human AMPK $\beta$ 1 encodes a 271 amino acid protein and human AMPK $\beta$ 2 encodes a 272 amino acid protein. The human AMPK $\gamma$ 1 gene encodes a 331 amino acid protein. Human AMPK $\gamma$ 2 and AMPK $\gamma$ 3, which are 569 and 492 amino acid proteins, respectively, contain unique N-terminal domains and may participate directly in the binding of AMP within the AMPK complex.

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Note: This product is for in vitro research use only