



Anti-PRKAA1 monoclonal antibody, clone 3C8 (DCABH-245)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Mouse monoclonal to AMPK alpha 1
Antigen Description	Responsible for the regulation of fatty acid synthesis by phosphorylation of acetyl-CoA carboxylase. It also regulates cholesterol synthesis via phosphorylation and inactivation of hormone-sensitive lipase and hydroxymethylglutaryl-CoA reductase. Appears to act as a metabolic stress-sensing protein kinase switching off biosynthetic pathways when cellular ATP levels are depleted and when 5-AMP rises in response to fuel limitation and/or hypoxia. This is a catalytic subunit.
Immunogen	Purified recombinant fragment of Human AMPK alpha 1 expressed in E. Coli.
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Mouse, Rat, Human, Monkey
Clone	3C8
Conjugate	Unconjugated
Applications	WB, ICC/IF, ELISA, IHC-P, Flow Cyt
Positive Control	Jurkat, HeLa, HepG2, MCF-7, Cos7, NIH3T3, K562, HEK293 and PC-12 cell lysates. Ovarian cancer and brain tissues. NTERA-2 and PC-2 cells.
Format	Liquid
Size	100 µl
Buffer	Preservative: 0.03% Sodium Azide; Constituents: Ascites

Preservative	0.03% Sodium Azide
Storage	store at -20°C. Avoid freeze / thaw cycles.
Ship	Shipped at 4°C.

GENE INFORMATION

Gene Name	PRKAA1 protein kinase, AMP-activated, alpha 1 catalytic subunit [Homo sapiens]
Official Symbol	PRKAA1
Synonyms	PRKAA1; protein kinase, AMP-activated, alpha 1 catalytic subunit; 5-AMP-activated protein kinase catalytic subunit alpha-1; AMPK; alpha; 1; AMPKa1; AMPK alpha 1; AMPK subunit alpha-1; tau-protein kinase PRKAA1; AMP -activate kinase alpha 1 subunit; AMP-ac
Entrez Gene ID	5562
Protein Refseq	NP_006242
UniProt ID	Q13131
Chromosome Location	5p12
Pathway	AMPK signaling, organism-specific biosystem; Adipocytokine signaling pathway, organism-specific biosystem; Adipocytokine signaling pathway, conserved biosystem; Energy Metabolism, organism-specific biosystem; Energy dependent regulation of mTOR by LKB1-AMPK, organism-specific biosystem; Hypertrophic cardiomyopathy (HCM), organism-specific biosystem; Hypertrophic cardiomyopathy (HCM), conserved biosystem;
Function	AMP-activated protein kinase activity; AMP-activated protein kinase activity; ATP binding; cAMP-dependent protein kinase activity; chromatin binding; histone serine kinase activity; metal ion binding; nucleotide binding; protein binding; protein kinase ac