

Recombinant Human Human Human PRKAA1, His-tagged

Cat. No. PRKAG1-31763TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length Human AMPK alpha1 + AMPK beta1 + AMPK gamma1 with C terminal His tag, expressed in a Baculovirus infected Sf9 cell expression system, 68kDa, 38kDa, and 40kDa respectively.
Species	Human
Description	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 is one of the gamma regulatory subunits of AMPK. Alternatively spliced transcript variants encoding distinct isoforms have been observed.
Conjugation	HIS
Biological activity	Specific Activity: 2755 nmol/min/mg.
Form	Liquid
Purity	>95% by SDS-PAGE
Storage buffer	Preservative: None Constituents: 25% Glycerol, 50mM Tris HCl, 150mM Sodium

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	chloride, 0.25mM DTT, 0.1mM EGTA, 0.1mM EDTA, 0.1mM PMSF, pH 7.5
Storage	Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.
Full Length	Full L.
GENE INFORMATION	
Gene Name	PRKAG1 protein kinase, AMP-activated, gamma 1 non-catalytic subunit [Homo sapiens]
Official Symbol	PRKAG1
Synonyms	PRKAG1; protein kinase, AMP-activated, gamma 1 non-catalytic subunit; 5-AMP-activated protein kinase subunit gamma-1;
Gene ID	5571
mRNA Refseq	NM_001206709
Protein Refseq	NP_001193638
MIM	602742
Uniprot ID	P54619
Chromosome Location	12q12-q14
Pathway	AMPK signaling, organism-specific biosystem; Adipocytokine signaling pathway, organism-specific biosystem; Adipocytokine signaling pathway, conserved biosystem;

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Energy Metabolism, organism-specific biosystem; Energy dependent regulation of mTOR by LKB1-AMPK, organism-specific biosystem;

Function

ADP binding; AMP binding; contributes_to AMP-activated protein kinase activity; ATP binding; cAMP-dependent protein kinase activity;

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