*h*AMPKγ1 VersaClone cDNA

Catalog Number: RDC2310

Specifications:

Gene:	*h*PRKAG1
Accession:	NP_002724
Insert size:	1009bp
Concentration:	10µg at 0.2µg/µL

Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

Preparation and Storage

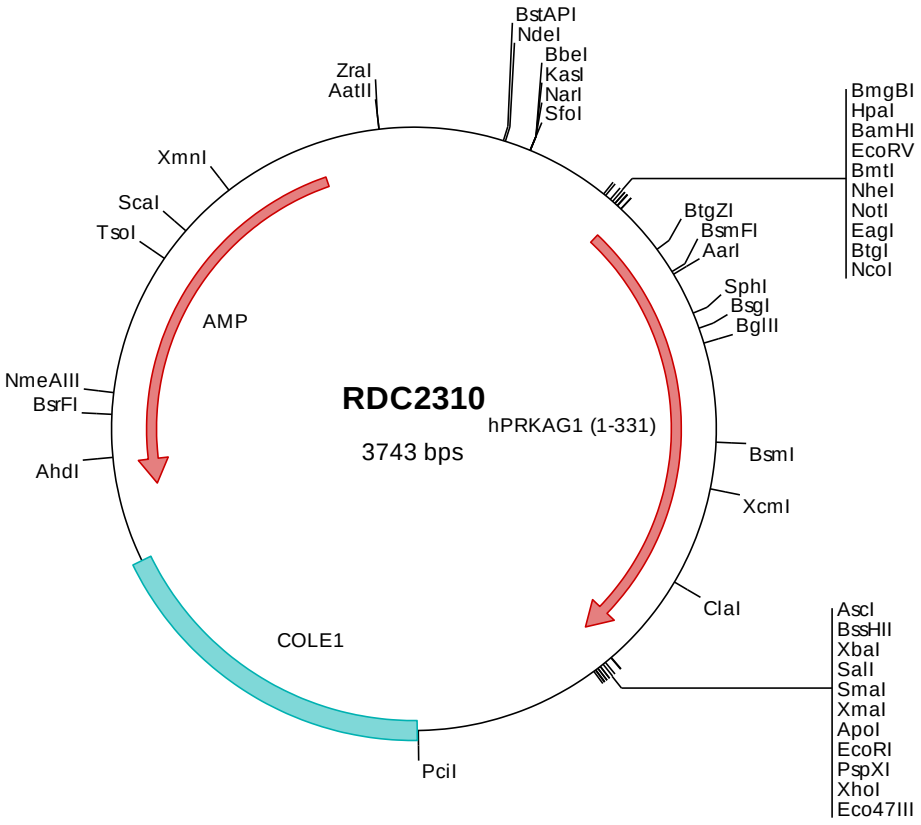
Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

*h*AMPKγ1 cDNA Plasmid

PRKAG1 protein kinase AMP-activated non-catalytic subunit gamma 1 [*Homo sapiens* (human)]

Also known as: AMPKG

Summary:
PRKAG1 is one of the gamma regulatory subunits 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. Alternatively spliced transcripts encoding different proteins have been described.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

R&D SYSTEMS
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> RDC2310 Plasmid DNA Sequence

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 201  ccgcacagat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctgcgc aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
 301  tacgccagct ggcgaaaggg ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgaatt
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 501  tcctcaagag accccagaat ccaacaatag cgtgtatact tccttcatga agtctcatcg ctgctatgac ctgattccca caagctccaa attggttgta
 601  tttgatacgt ccctgcaggt gaagaaagct ttttttgctt tggtgactaa cggtgtacga gctgcccctt tatgggatag taagaagcaa agttttgtgg
 701  gcatgctgac catcactgat ttcatcaata tcctgcaccg ctactataaa tcagccttgg tacagatcta tgagctagaa gaacacaaga tagaaacttg
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1701  tcggccaacg cgcggggaga ggcggtttgc gtattgggcg ctcttccgct tcctcgctca ctgactcgct gcgctcggtc gttcggctgc ggcgagcggt
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> RDC2310 Translated Insert Sequence

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 201  yaniamvrtt tpvyvalgif vqhrvsalpv vdekgrvvdi yskfdvinla aektynnldv svtkalqhrs hyfegvlkcy lhetletiin rlveaevhrl
 301  vvvdendvvk givslsdilq alvltggekk p
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