*h*AMPKγ3 VersaClone cDNA

Catalog Number: RDC2311

Specifications:

Gene:	*h*PRKAG3
Accession:	NP_059127
Insert size:	1483bp
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

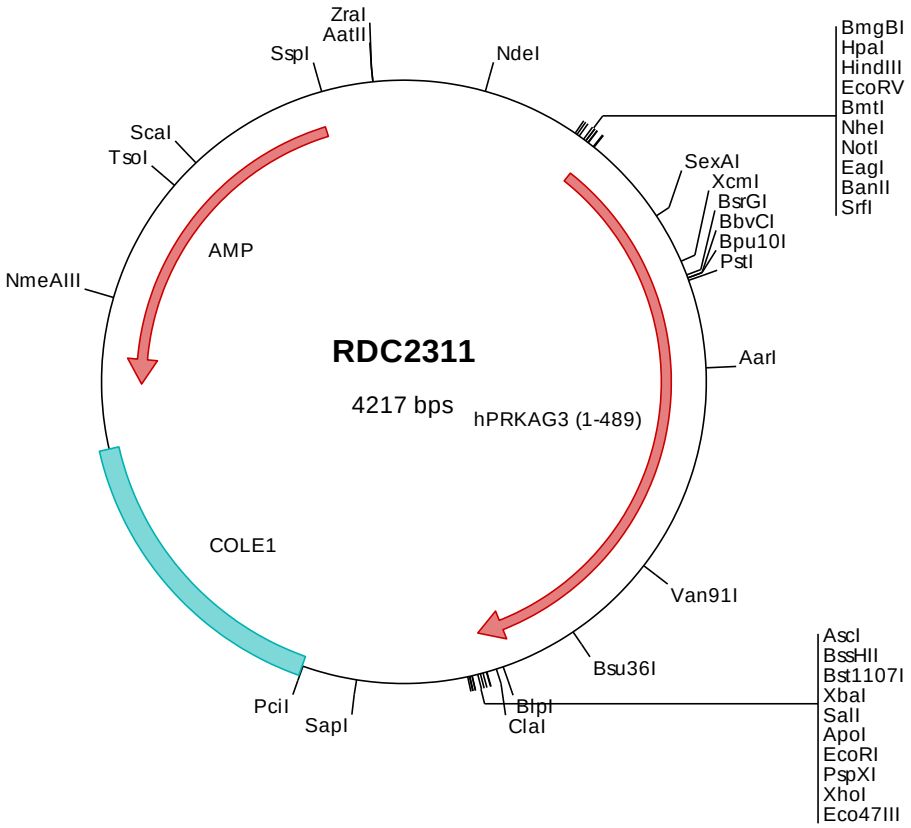
Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

*h*AMPKγ3 cDNA Plasmid

PRKAG3 protein kinase AMP-activated non-catalytic subunit gamma 3 [Homo sapiens (human)]

Also known as: AMPKG3

Summary:
PRKAG3 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. PRKAG3 is dominantly expressed in skeletal muscle.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

R&D SYSTEMS
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> RDC2311 Plasmid DNA Sequence

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 101  tcagggcgcg tcagcgggtg ttggcgggtg tcggggctgg cttaactatg cggcatcaga gcagattgta ctgagagtgc accatatgcg gtgtgaaata
 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  ccttgggggt tctgagcatc aagagatgag cttcctagag caagaaaaca gcagctcatg gccatcacca gctgtgacca gcagctcaga aagaatccgt
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 801  cccctctgac tgtacagcct cagctgcagg ctccagcaca gatgatgtgg agctggccac ggagttccca gccacagagg cctgggagtg tgagctagaa
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1701  gggagaagcc ctgaggcaga ggacactatg tctggaggga gtcctttcct gccagcccca cgagagcttg ggggaagtga tcgacaggat tgctcgggag
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2001  agctgtttcc tgtgtgaaat tgttatccgc tcacaattcc acacaacata cgagccggaa gcataaagtg taaagcctgg ggtgcctaat gagtgagcta
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> RDC2311 Translated Insert Sequence

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 201  sklvifdtml eikkaffalv angvraaplw dskkqsfvgm ltitdfilvl hryyrsplvq iyeieqhkie twreiylqgc fkplvsispn dslfeavytl
 301  iknrihrlpv ldpvsgnvlh ilthkrllkf lhifgslpr psflyrtiqd lgigtfrdla vvletapilt aldifvdrrv salpvvnecg qvvglysrfd
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```