

Specifications:

Gene:	<i>hPC</i>
Accession:	NP_071504.2
Insert size:	3550bp
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.

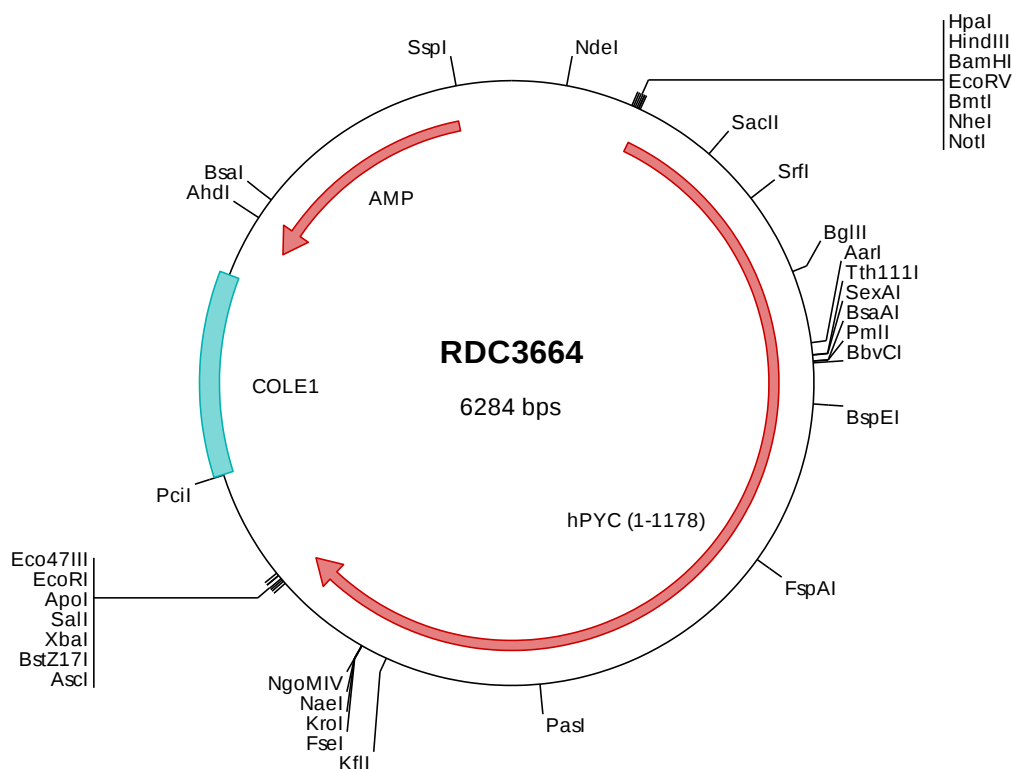
hPyruvate Carboxylase cDNA Plasmid

PC pyruvate carboxylase
[*Homo sapiens* (human)]

Also known as: PCB

Summary:

Pyruvate carboxylase requires biotin and ATP to catalyse the carboxylation of pyruvate to oxaloacetate. It is a homotetramer arranged in a tetrahedron which is located exclusively in the mitochondrial matrix. Pyruvate carboxylase is involved in gluconeogenesis, lipogenesis, insulin secretion and synthesis of the neurotransmitter glutamate. Mutations in pyruvate carboxylase have been associated with pyruvate carboxylase deficiency. Alternatively spliced transcript variants with different 5' UTRs, but encoding the same protein, have been found for pyruvate carboxylase.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

> RDC3664 Plasmid DNA Sequence

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1   tcgcgcgcttt cggatgatgac ggtgaaaacc tctgacacat gcagctcccg gagacggtca cagcttgtct gtaagcggat gccgggagca gacaagcccg
101  tcagggcgcg tcagcgggtg ttggcgggtg tcggggctgg cggcatcaga gcagattgta ctgagagtg accatatgcg gtgtgaaata
201  ccgcacacgat gcgtaaggag aaaataccgc atcaggcgcc aggtctgcgc caggtgttgg aagggcgatc ggtgcgggcc tcttcgctat
301  tacggcagctt ggcgaaaggg ggaatgtctg caaggcgatt aagttgggta acgccagggtt tttcccagtc acgacgttgt aaaacgacgg ccagtgaaat
401  ggagacgtgt taacaagctt ggaatccgata tcgctagcgc ggccgcccacc atgtgaaagt tccgaacagt ccatgggggc ctgaggctcc tgggaatccg
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601  cgtgtgttcc gggcctgcac ggagctgggc atccgcacgg tagccatctc ctctgagcag gacacggggc agatgcaccg gcagaaagca gatgaagctc
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> RDC3664 Translated Insert Sequence

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101  diikvakenn vdavhpgygf lseradfaqa cqdagvrfrlg pspevvrrkmg dkvearaiaai aagvvpvpgt dapitslhea hefntyygfp iifkaayggg
201  grgmrvvhsy eeleenytra ysealaafgn galfvekfi kprhievqil gdqygnlhlh yerdcsiqr hqkvveiapa ahlqpqlrtr ltsdsvklak
301  qvygenagtv eflvdrhgkh yfievnsrlq vehtvteeit dvdvlvhaqih vaegrsldpl glrqenirln gcaicqrvtt edparsfpqd rgrievfrsg
401  egmgirldna safggavisp hydslilvkvi ahgkdhptaa rvrvgvknia flqnlvlnng flagvtdtqf idenpelfq rpaqnrakkl
501  lhylghvmvn gpttpipvka spsptdpvvp avpigpppag frdillregp egfaravrnh pglllmdttf rdahqslilat rvrthdlkki apyvahnfsk
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701  eaaisytdgv advsrtykyl qyyymglael vragthilci kdmgallkpt atcmvlvsslr hthdtsagav aamlacagag advvdaads
801  msgmstqpsm galvactrgt pldtevpmer vfdyseyweg arglyaaafc tatmksnsgd vyeneipggg ytnlhfgahs mglgskfkev kkeyveanqm
901  lgdlikvtps skivgdlaqf mvngnlsrae aeaqaelsf prsvvelflg yigvphggfp epfrskvlkd lprvegrpga slppldlqal ekelvdrhge
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