

Specifications:

Gene:	hIDH1
Accession:	NP_005887.2
Insert size:	1258bp
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.

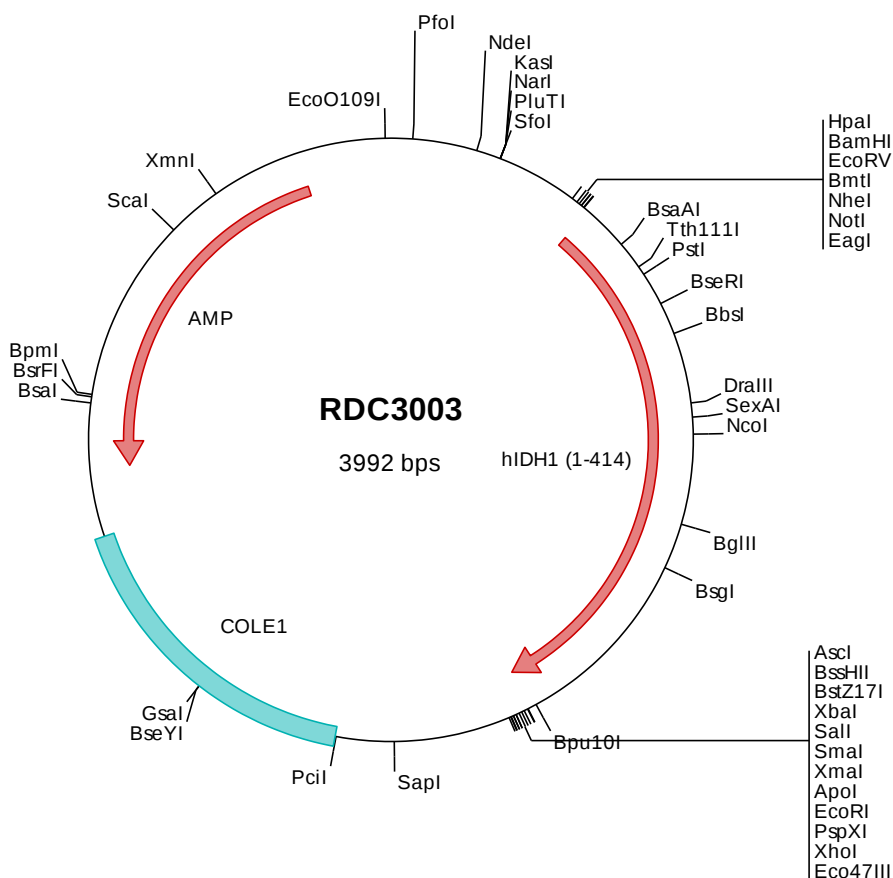
hIDH1 cDNA Plasmid

IDH1 isocitrate dehydrogenase (NADP(+)) 1 [*Homo sapiens* (human)]

Also known as: IDH; IDP; IDCD; IDPC; PICD; HEL-216; HEL-S-26

Summary:

IDH1 catalyzes the oxidative decarboxylation of isocitrate to alpha-ketoglutarate. It is a NADP(+)-dependent isocitrate dehydrogenase found in the cytoplasm and peroxisomes. The presence of IDH1 in peroxisomes suggests roles in the regeneration of NADPH for intraperoxisomal reductions, such as the conversion of 2, 4-dienoyl-CoAs to 3-enoyl-CoAs, as well as in peroxisomal reactions that consume 2-oxoglutarate, namely the alpha-hydroxylation of phytanic acid. The cytoplasmic IDH1 serves a significant role in cytoplasmic NADPH production.



> RDC3003 Plasmid DNA Sequence

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201  ccgcacacgat gcgtaaggag aaaataccgc atcaggcgcc attcgccatt caggctcgcg aactgttggg aagggcgatc ggtgcgggcc tcttcgctat
301  tacgccagct ggcgaaaagg ggatgtgctg caaggcgatt aagttgggta acgccagggt tttcccagtc acgacgttgt aaaacgacgg ccagtgaatt
401  ggagacgtgt taacaagctt ggatccgata tcgctagcgc ggccgcccacc atgtccaaaa aaatcagtg cggttctgtg gtagagatgc aaggagatga
501  aatgacacga atcatttggg aattgattaa agagaaaactc atttttccct acgtggaatt ggaatctacat agctatgatt taggcataga gaatcgtgat
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> RDC3003 Translated Insert Sequence

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201  lskgwplyls tkntilkkyd grfkdifqei ydkqyksqfe aqkiwyehrl iddmvaqamk seggfiwack nydgdvqsds vaqgygslgm mtsvvlvcpdg
301  ktveaeaaahg tvtrhrymyq kgqetstnpi asifawtrgl ahrakldnnk elaffanale evsietieag fmktdlaaci kglpnvqrds ylnftfemd
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