

Product datasheet for SC335729

IDH3B (NM_001258384) Human Untagged Clone

Product data:

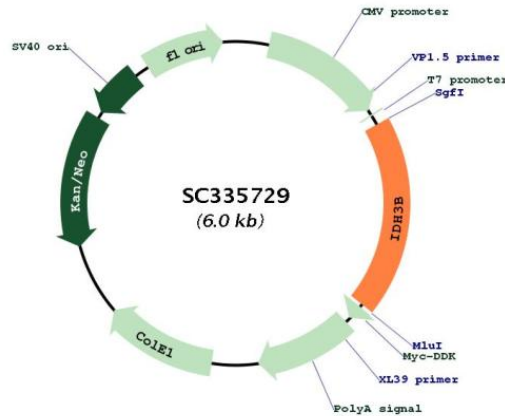
Product Type:	Expression Plasmids
Product Name:	IDH3B (NM_001258384) Human Untagged Clone
Tag:	Tag Free
Symbol:	IDH3B
Synonyms:	RP46
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC335729 representing NM_001258384. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCC CGGATCGCC
ATGGCGGCATTGAGCGGAGTCCGCTGGCTGACCCGAGCGCTGGTCTCCGCCGGGAACCTGGGGCATGG
AGAGGTCTGAGTACCTCGGCCGCGGCACGCTGCATCGCGGAGCCAGGCCGAGGACGTGAGGGTGGAG
GGCTCCTTTCCCGTGACCATGCTCCGGGAGACGGTGTGGGGCCTGAGCTGATGCACGCCGTC AAGGAG
GTGTTCAAGGCTGCCGCTGTCCAGTGGAGTTCAGGAGCACCACTGAGTGAGGTGCAGAATATGGCA
TCTGAGGAGAAGCTGGAGCAGGTGCTGAGTTCCATGAAGGAGAACAAGTGGCCATCATTGGAAAGATT
CATACCCCGATGGAGTATAAGGGGGAGCTAGCCTCCTATGATATGCCGGCTGAGGCGTAAGTTGGACTTA
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TGCATGCAGCTGGTGCAGAATCCTTACCAGTTTGATGTGCTTGTGATGCCAATCTCTATGGGAACATT
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CCACTGCCCTTTTCATGGGCCATCTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: SgfI-MluI



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Plasmid Map:


ACCN: NM_001258384

Insert Size: 1131 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001258384.2](#)

RefSeq Size: 1404 bp

RefSeq ORF: 1131 bp

Locus ID: 3420

Cytogenetics: 20p13

Protein Pathways: Citrate cycle (TCA cycle), Metabolic pathways

MW: 41.2 kDa

Gene Summary:

Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. These enzymes belong to two distinct subclasses, one of which utilizes NAD(+) as the electron acceptor and the other NADP(+). Five isocitrate dehydrogenases have been reported: three NAD(+)-dependent isocitrate dehydrogenases, which localize to the mitochondrial matrix, and two NADP(+)-dependent isocitrate dehydrogenases, one of which is mitochondrial and the other predominantly cytosolic. NAD(+)-dependent isocitrate dehydrogenases catalyze the allosterically regulated rate-limiting step of the tricarboxylic acid cycle. Each isozyme is a heterotetramer that is composed of two alpha subunits, one beta subunit, and one gamma subunit. The protein encoded by this gene is the beta subunit of one isozyme of NAD(+)-dependent isocitrate dehydrogenase. Multiple alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Sep 2016]

Transcript Variant: This variant (4) differs in the 3' UTR and coding sequence compared to variant 1. The resulting isoform (d) has a shorter and distinct C-terminus compared to isoform a.