

Product datasheet for **SC335869**

IDH2 (NM_001289910) Human Untagged Clone

Product data:

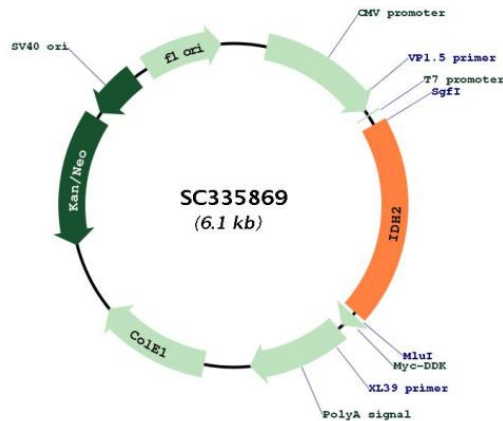
Product Type:	Expression Plasmids
Product Name:	IDH2 (NM_001289910) Human Untagged Clone
Tag:	Tag Free
Symbol:	IDH2
Synonyms:	D2HGA2; ICD-M; IDH; IDHM; IDP; IDPM; mNADP-IDH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC335869 representing NM_001289910. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGATGGTGATGAGATGACCCGTATTATCTGGCAGTTCATCAAGGAGAAGCTCATCCTGCCCCACGTG
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CGTGTGGAAGAGTTCAAGCTGAAGAAGATGTGAAAAGTCCCAATGGAACATCCGGAACATCCTGGGG
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CAGTATGCCATCCAGAAGAAATGGCCGCTGTACATGAGCACAAGAACCATACTGAAAGCCTACGAT
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TGGCCTGCAAGAAGTATGACGGAGATGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGT
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CTGGAGAAGTGTGCGTGGAGACGGTGGAGAGTGGAGCCATGACCAAGGACCTGGCGGGCTGCATTCAC
GGCCTCAGCAATGTGAAGCTGAACGAGCACTTCTGAACACCACGGACTTCTCGACACCATCAAGAGC
AACCTGGACAGAGCCCTGGGCAGGCAGTAG
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: Sgfl-Mlul



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Plasmid Map:


ACCN: NM_001289910

Insert Size: 1203 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_001289910.1](#)

RefSeq Size: 1578 bp

RefSeq ORF: 1203 bp

Locus ID: 3418

UniProt ID: [P48735](#)

Cytogenetics: 15q26.1

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

MW: 45.2 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. Each NADP(+)-dependent isozyme is a homodimer. The protein encoded by this gene is the NADP(+)-dependent isocitrate dehydrogenase found in the mitochondria. It plays a role in intermediary metabolism and energy production. This protein may tightly associate or interact with the pyruvate dehydrogenase complex. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2014]

Transcript Variant: This variant (2) differs in the 5' UTR and coding region and initiates translation at a downstream start codon compared to variant 1. The resulting isoform (2) is shorter at the N-terminus compared to isoform 1.