

Product datasheet for **SC110928**

IDH3B (NM_006899) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IDH3B (NM_006899) Human Untagged Clone
Tag:	Tag Free
Symbol:	IDH3B
Synonyms:	RP46
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_006899, the custom clone sequence may differ by one or more nucleotides

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ATGGCGGCATTGAGCGGAGTCCGCTGGCTGACCCGAGCGCTGGTCTCCGCCGGGAACCCTGGGGCATGGA  
GAGGTCTGAGTACCTCGGCCGCGCGCACGCTGCATCGCGGAGCCAGGCCGAGGACGTGAGGGTGGAGGG  
CTCCTTTCCCGTGACCATGCTTCCGGGAGACGGTGTGGGGCCTGAGCTGATGCACGCCGTC AAGGAGGTG  
TTCAAGGCTGCCGCTGTCCAGTGGAGTCCAGGAGCACCTGAGTGGGTGCAGAATATGGCATCTG  
AGGAGAAGCTGGAGCAGGTGCTGAGTTCATGAAGGAGAACAAAGTGCCATCATTGAAAGATTCATC  
CCCAGTGGAGTATAAGGGGGAGCTAGCCTCCTATGATATGCGGCTGAGGCGTAAGTTGGACTTATTTGCC  
AACGTAGTCCATGTGAAGTCACTTCCTGGGTATATGACTCGGCACAACAATCTAGACCTGGTGATCATT  
GAGAGCAGACAGAAGGGGAGTACAGCTCTCTGGAACATGAGAGTGAAGGGGTGTGATTGAGTGTGGAA  
GATTGTACACGAGCCAAGTCTCAGCGGATTGCAAAGTTCGCCTTTGACTATGCCACCAAGAAGGGGCGG  
GGCAAGGTCAGTCTGTCCACAAGGCCAACATCATGAACTTGGGGATGGGTTGTTCTCGCAGTGTGTG  
AGGAAGTTGCTGAACTGTACCCCAAAATCAAATTTGAGACAATGATCATAGACAAGTGTGATGCAAGT  
GGTGCAGAATCCTTACCAGTTTGTGCTTGTGATGCCCAATCTCTATGGGAACATTATTGACAATCTG  
GCTGCTGGCCTGGTTGGGGGAGCTGGTGTGGTCCCTGGTGGAGAGCTATAGTGCAGAATACGCAGTCTTTG  
AGACGGGTGCCCGCACCCATTTGCCAGGCAGTGGGCAGGAATATAGCCAATCCCACGGCCATGCTGCT  
GTCGGCTTCCAACATGCTGCGGCATCTTAATCTTGAGTATCACTCCAGCATGATCGCAGATGCGGTGAAG  
AAGGTGATCAAAGTTGGCAAGGTGCGGACTCGAGACATGGCGGCTACAGCACCACAACCGACTTCATCA  
AGTCTGTCATCGGTACCTGCAGACTAAAGGGAGCTAG
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_006899 unedited
 TGTAATACGACTCACTATAGGGCGGCCGAATTCGGCACGAGGTCTGCGGGAACATG
 GCGGCATTGAGCGGAGTCCGCTGGCTGACCCGAGCGCTGGTCTCCGCCGGGAACCCTGGG
 GCATGGAGAGGTCTGAGTACCTCGGCCGCGGCACGCTGCATCGCGGAGCCAGGCCGAG
 GACGTGAGGGTGGAGGGCTCCTTCCCCTGACCATGCTTCCGGGAGACGGTGTGGGGCCT
 GAGCTGATGCACGCCGTCAAGGAGGTGTCAAGGCTGCCGCTGTCCCAGTGGAGTCCAG
 GAGCACCACTGAGTGAAGTGCAGAATATGGCATCTGAGGAGAAGCTGGAGCAGGTGCTG
 AGTTCCATGAAGGAGAACAAGTGGCCATCATTGGAAAGATTCAACCCGATGGAGTAT
 AAGGGGGAGCTAGCCTCCTATGATATGCGGCTGAGGCGTAAGTTGGAAGTATTTGCCAAC
 GTAGTCCATGTGAAGTCACTTCCCTGGGTATATGACTCGGCACAACAATCTAGACCTGGT
 ATCATTGAGAGCAGACAGAAGGGGAGTACAGCTCTCTGGAACATGAGAGTGCAAGGGGT
 GTGATTGAGTGTGAAAGATTGTACACGAGCCAAGTCTCAGCGGATTGGCAAAGTTCGC
 CTTTGACTATGCCACCAAGAAGGGGCGNNGCAGGTCACTGCTGTCCACAAGGCCAACAT
 CATGAAACTGGGATGGNNNTGTCTGCANTGCTGTGAGGAAAGTGTGAACTGTACCC
 CAAATCAAATTTGAGACATGATCATAGACCACTGCTGCATGCAGCTGGTCAAATCCTT
 ACAGNNNTGATGTGCTTGTGATGCCCCATCTCTATGGGAACATATNGACATCTGGCTGCT
 GGNT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_006899 unedited
 TATGTACCGCGGCCGAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTGGTTCATGTT
 TTTATTGAACACCTTACATGGGTATGGACAGGGCCTATGGGTGGGGCAAGGCAGCAATGA
 CAGCCTCAGTGAAGTCATGGCAAGTAGCATAGCCACCCATGTGAGAGTTCGAACCCAGC
 AAGGTGACCATGGTCCACTGCTTAAAGGCACAAGTCTCTTCCCTGGTACTGACTGACTGA
 AGGGTATGGGGAGTGTGGTCCTTGAAGTTGGAAGAAATAAAGGCTCTAGCTCCCTTT
 AGTCTGCAGGTGACCGATGACAGACTTGATGAAGTCGGTGTGGTGTGTAGCCGCCAT
 GTCTCGAGTCCGCACCTTCCAACCTTGTACCTTCTCACCGCATCTGCGATCATGCT
 GGAGTGATACTCAAGATTAAGATGCCGCAGCATGTTGGAAGCCGACAGCAGCATGGCCGT
 GGGATTGGCTATATTCTGCCACTGCCTGGGCAAATGGGTGCCGGGCACCCGTCTAAA
 GACTGCGTATTCTGACTATAGCTCTCACCAGGGACCACACCAGCTTCCCAACCCAGGCC
 AGCAGCCAGATTGTCAATAATGTTCCCATAAAGATTGGGCATCACAAGCACATTAACCCG
 GTAAAGATCTGCACCACTGCATGCCACAGTTGGCTATGATCATTGTCTAAAATTTGAT
 TTTGGGGTACAGTCCACATACTTTCTTACCAGACTGCCAGAACAACCCCTTCCCAATTT
 CATGATGTTGGCCCTGTGGACAGAAGTGAAGTGCACCGCCCTTCTTGGGGCCCAACAA
 AAGCGAAGTTTGCATCCGCTGAGACTTGCTTCGGGGAAA

Restriction Sites:

NotI-NotI

ACCN:

NM_006899

Insert Size:

1430 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:	<ol style="list-style-type: none">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_006899.2 , NP_008830.2
RefSeq Size:	1561 bp
RefSeq ORF:	1158 bp
Locus ID:	3420
UniProt ID:	O43837
Cytogenetics:	20p13
Domains:	isodh
Protein Pathways:	Citrate cycle (TCA cycle), Metabolic pathways
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (1) represents the predominate transcript and encodes isoform (a).</p>