

## Product datasheet for SC210544

### Isocitrate dehydrogenase (IDH1) (NM\_005896) Human 3' UTR Clone

#### Product data:

Product Type:	3' UTR Clones
Product Name:	Isocitrate dehydrogenase (IDH1) (NM_005896) Human 3' UTR Clone
Symbol:	Isocitrate dehydrogenase
Synonyms:	HEL-216; HEL-S-26; IDCD; IDH; IDP; IDPC; PICD
Mammalian Cell Selection:	Neomycin
Vector:	pMirTarget (PS100062)
ACCN:	NM_005896
Insert Size:	866 bp
Insert Sequence:	<p>&gt;SC210544 3' UTR clone of NM_005896</p> <p>The sequence shown below is from the reference sequence of NM_005896. The complete sequence of this clone may contain minor differences, such as SNPs. <b>Red</b>=Cloning site  <b>Blue</b>=Stop Codon</p>

CAATTGGCAGAGCTCAGAATTCAA**GCGATCGC**

CTTGGAGAAAACCTGAAGATCAAACCTAGCTCAGGCCAAACCTT**TAAG**TTTCATACCTGAGCTAAGAAGGATA  
 ATTGTCTTTTGGTAAGTCTACAGGTTTACATTTTCTGTGTACACTCAAGGATAAAGGCAAAATC  
 AATTTTGTAAATTTGTTTAGAAGCCAGAGTTTATCTTTTCTATAAGTTTACAGCCTTTTCTTATATATAC  
 AGTTATTGCCACCTTTGTGAACATGGCAAGGGACTTTTTTACAATTTTATTTTATTTTCTAGTACCAGC  
 CTAGGAATTCGGTTAGTACTCATTTGTATTCACTGTCACTTTTCTCATGTTCTAATTATAAATGACCAA  
 AATCAAGATTGCTCAAAAGGGTAAATGATAGCCACAGTATTGCTCCCTAAATATGCATAAAGTAGAAAT  
 TCACTGCCTTCCCCTCCTGTCCATGACCTTGGGCACAGGGAAGTTCTGGTGTCATAGATATCCCCTTTTG  
 TGAGGTAGAGCTGTGCATTAACTTGCACATGACTGGAACGAAGTATGAGTGCAACTCAAATGTGTTGAA  
 GATACTGCAGTCATTTTGTAAAGACCTTGCTGAATGTTTCCAATAGACTAAATACTGTTTAGGCCGCAG  
 GAGAGTTTGAATCCGAATAAATACTACCTGGAGGTTTGTCTCTCCATTTTCTTTCTCTCTCTG  
 CCTGGCCTGAATATTACTACTCTAAATAGCATATTTTCATCCAAGTGCAATAATGTAAGCTGAATCTTT  
 TTTGGACTTCTGCTGGCCTGTTTTATTCTTTTATATAAATGTGATTTCTCAGAAATTGATATTAACAC  
 TATCTTATCTTCTCCTGAACTGTTGA

**ACGCGT**AAGCGGCCGCGGCATCTAGATTCAAGAAAATGACCG

Restriction Sites: SgfI-MluI



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<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the sequence identifier above as a point of reference. Note that the complete sequence of this clone is largely the same as the reference sequence but may contain minor differences , e.g., single nucleotide polymorphisms (SNPs).
<b>Components:</b>	The cDNA clone is shipped in a 2-D bar-coded Matrix tube as 10 ug dried plasmid DNA. The package also includes 100 pmols of both the corresponding 5' and 3' vector primers in separate vials.
<b>RefSeq:</b>	<a href="#">NM_005896.2</a>
<b>Summary:</b>	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 cytoplasm and peroxisomes. It contains the PTS-1 peroxisomal targeting signal sequence. The presence of this enzyme 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 enzyme serves a significant role in cytoplasmic NADPH production. Alternatively spliced transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Sep 2013]
<b>Locus ID:</b>	3417