

Product datasheet for **SC323781**

IDH3G (NM_004135) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IDH3G (NM_004135) Human Untagged Clone
Tag:	Tag Free
Symbol:	IDH3G
Synonyms:	H-IDHG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_004135.2
GGTATCTGCGTGTCTGGGACGTGCGGAGGCTCTCACTTCCGTTCATGGCGTGAAGGTAGC
GACCGTCGCCGGCAGCGCCGCGAAGGCGGTGCTCGGGCCAGCCCTTCTCTGCCGTCCTG
GGAGGTTCTAGGCGCCACGAGGTCCCCTCGAGGAACATCTTTTTCAGAACAAACAATTCC
TCCGTCCGCTAAGTATGGCGGGCGCACACGGTACCATGATCCCAGGGATGGCATCGG
GCCAGAGCTCATGCTGCATGTCAAGTCCGTCTTCAGGCACGCATGTGTACCAGTGGACTT
TGAAGAGGTGCACGTGAGTTCCAATGCTGATGAAGAGGACATTGCAATGCCATCATGGC
CATCCGCCGAACCGGTGGCCCTGAAGGGCAACATCGAAACCAACCATAACCTGCCACC
GTCGCACAAATCTCGAAACAACATCCTTCGCACCAGCCTGGACCTCTATGCCAACGTCAT
CCTACTGTAAGAGCCTTCCAGGCGTGGTGACCCGGCACAAGGACATAGACATCCTCATTGT
CCGGGAGAACACAGAGGGCGAGTACAGCAGCCTGGAGCATGAGAGTGTGGCGGGAGTGGT
GGAGAGCCTGAAGATCATCACCAGGCCAAGTCCCTGCGCATTGCCGAGTATGCCTTCAA
GCTGGCGCAGGAGAGCGGGCGCAAGAAAGTGACGGCCGTGCACAAGGCCAACATCATGAA
ACTGGGCGATGGGCTTTTCTCCAGTGTGTCAGGGAGGTGGCAGCCCGCTACCCTCAGAT
CACCTTCGAGAACATGATTGTGGATAACACCACCATGCAGCTGGTGTCCCGGCCCCAGCA
GTTTGTATGTCATGGTGTGATGCCAATCTCTATGGCAACATCGTCAACAATGTCTGCGCGG
ACTGGTCCGGGGCCAGGCCTTGTGGCTGGGGCCAACATGGCCATGTGTACGCGGTGTT
TGAAACAGCTACGAGGAACACCGGCAAGAGTATCGCCAATAAGAACATCGCCAACCCAC
GGCCACCCTGCTGGCCAGCTGCATGATGCTGGACCACCTCAAGCTGCACTCCTATGCCAC
CTCCATCCGTAAGGCTGTCCATGGCATCCATGGACAATGAGAATATGCACACTCCGGACAT
CGGGGGCCAGGGCACAACATCTGAAGCCATCCAGGACGTATCCGCCACATCCGCGTCAT
CAACGGCCGGGCGTGGAGGCTAGGCTGGCCCTAGGACCTTCTTGGTTTGTCTCTTGG
TTCCCCTTCCCCTCCAGCACCCAGCCAGCCTGGTACGCAGATCCCAGAATAAAGCACC
TTCTCCCTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: ECoRI-NOT



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ACCN:	NM_004135
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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_004135.2 , NP_004126.1
RefSeq Size:	1500 bp
RefSeq ORF:	1182 bp
Locus ID:	3421
UniProt ID:	P51553
Cytogenetics:	Xq28
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 gamma subunit of one isozyme of NAD(+)-dependent isocitrate dehydrogenase. This gene is a candidate gene for periventricular heterotopia. Several alternatively spliced transcript variants of this gene have been described, but only some of their full length natures have been determined. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (1) encodes the longer isoform (a).</p>