

## Product datasheet for **RG237440**

### IDH2 (NM\_001290114) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	IDH2 (NM_001290114) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	IDH2
Synonyms:	D2HGA2; ICD-M; IDH; IDHM; IDP; IDPM; mNADP-IDH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG237440 representing NM_001290114. Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGTGGAAAAGTCCCAATGGAACATCCGGAACATCCTGGGGGGGACTGTCTCCGGGAGCCCATCATC
TGCAAAAACATCCCACGCCTAGTCCCTGGCTGGACCAAGCCCATCACCATTGGCAGGCACGCCCATGGC
GACCAGTACAAGGCCACAGACTTTGTGGCAGACCCGGCCGGCAGCTTTCAAATGGTCTTCACCCAAAA
GATGGCAGTGGTGTCAAGGAGTGGGAAGTGTACAACCTCCCCGAGCGGCGTGGGCATGGGCATGTAC
AACACCGACGAGTCCATCTCAGGTTTTGCGCACAGCTGCTTCCAGTATGCCATCCAGAAGAAATGGCCG
CTGTACATGAGCACCAAGAACCATACTGAAAGCCTACGATGGGCGTTTCAAGGACATCTCCAGGAG
ATCTTTGACAAGCACTATAAGACCGACTTCGACAAGAATAAGATCTGGTATGAGCACCGGCTCATTGAT
GACATGGTGGCTCAGGTCTCAAGTCTTCGGGTGGCTTTGTGTGGGCTGCAAGAACTATGACGGAGAT
GTGCAGTCAGACATCCTGGCCCAGGGCTTTGGCTCCCTTGGCCTGATGACGTCCGTCTGGTCTGCCCT
GATGGGAAGACGATTGAGGCTGAGGCCGCTCATGGGACCGTCACCCGCCACTATCGGGAGCACCAGAAG
GGCCGGCCACCAGCACCAACCCATCGCCAGCATCTTTGCTGGACACGTGGCCTGGAGCACCAGGGG
AAGCTGGATGGGAACCAAGACCTCATCAGTTTTGCCAGATGTGGAGAAGGTGTGCGTGGAGACCGGTG
GAGAGTGGAGCCATGACCAAGGACCTGGCGGGCTGCATTACGGCCTCAGCAATGTGAAGCTGAACGAG
CACTTCTGAACACCACGGACTTCCTCGACACCATCAAGAGCAACCTGGACAGAGCCCTGGCAGGCAG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



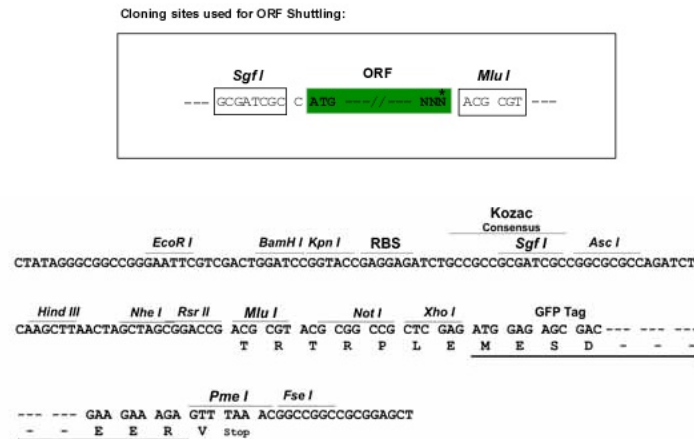
[View online »](#)

**Protein Sequence:** >Peptide sequence encoded by RG237440  
 Blue=ORF Red=Cloning site Green=Tag(s)

MWKSPNGTIRNILGGTVFREPIICKNIPRLVPGWTKPITIGRHAHGDQYKATDFVADRAGTFKMFVTPK  
 DGSGVKEWEVYNFPAGGVGMGYNTDESISGF AHSCFQYAIQKKWPLYMSTKNTILKAYDGRFKDIFQE  
 IFDKHYKTDFDKNIWYEHRLIDDMVAQVLKSSGGFVWACKNYDGDVQSDILAQQFGSLGLMSTVLVCP  
 DGKTIEAEAAGHTVTRHYREHQKGRPTSTNPIASIFAWTRGLEHRGKLDGNQDLIRFAQMLEKVCVETV  
 ESGAMTKDLAGCIHGLSNVKLNEHFLNTDFLDTIKSNLDRALGRQ  
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRS NATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001290114

**ORF Size:** 966 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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).

**RefSeq:** [NM\\_001290114.2](#)

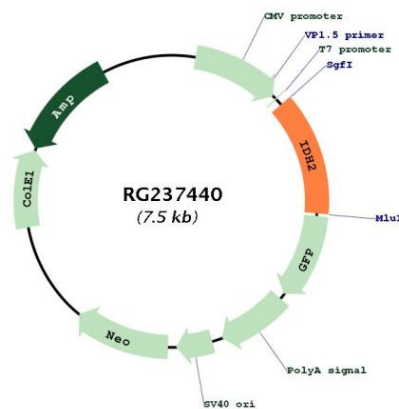
**RefSeq Size:** 1560 bp

**RefSeq ORF:** 969 bp

**Locus ID:** 3418  
**UniProt ID:** [P48735](#)  
**Cytogenetics:** 15q26.1  
**Protein Pathways:** Citrate cycle (TCA cycle), Glutathione metabolism, Metabolic pathways  
**MW:** 36.6 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]

### Product images:



Circular map for RG237440