

## Product datasheet for SC118914

### ENO3 (NM\_001976) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ENO3 (NM_001976) Human Untagged Clone
Tag:	Tag Free
Symbol:	ENO3
Synonyms:	GSD13; MSE
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC118914 sequence for NM_001976 edited (data generated by NextGen Sequencing)

```
ATGGCCATGCAGAAAATCTTTGCCCGGAAATCTTGGACTCCAGGGGCAACCCACGGT  
GAGGTGGACCTGCACACGGCCAAGGCGGATTCCGAGCAGCTGTGCCAGTGGGGCTTCC  
ACGGGTATCTATGAGGCTCTGGAATAAGAGACGAGACAAAGGCCGCTACCTGGGAAA  
GGAGTCTGAAGGCTGTGGAGAATCAACAGTACTCTGGGCCCTGCTCTGCTGAAAAG  
AACTAAGCGTTGCGGATCAAGAAAAAGTTGACAAATTTATGATTGAGCTAGATGGGACC  
GAGAATAAGTCCAAGTTTGGGGCAATGCCATCCTGGGCGTGTCTTGGCCGTGTGAAG  
GCGGGAGCAGCTGAGAAGGGGTCCCCGTACCGCCACATCGCAGATCTCGCTGGGAAC  
CCTGACCTCATACTCCCAGTGCCAGCCTTCAATGTGATCAACGGGGCTCCCATGCTGGA  
AACAAAGCTGGCCATGCAGGAGTTCATGATTCTGCCTGTGGGAGCCAGCTCCTTCAAGGAA  
GCCATGCGCATTGGCGCCGAGGTCTACCACCACCTCAAGGGGGTCAAGGCCAAGTAT  
GGGAAGGATGCCACCAATGTGGGTGATGAAGGTGGCTTCGCACCAACATCCTGGAGAAC  
AATGAGGCCCTGGAGCTGCTGAAGACGGCCATCCAGGCGGCTGGTTACCCAGACAAGGTG  
GTGATCGGCATGGATGTGGCAGCATCTGAGTCTATCGCAATGGGAAGTACGATCTTGAC  
TTCAAGTCGCCTGATGATCCCGCACGGCACATCACTGGGAGAAGCTCGGAGAGCTGAT  
AAGAGCTTTATCAAGAACTATCCTGTGGTCTCCATCGAAGACCCCTTTGACCAGGATGAC  
TGGGCCACTTGGACCTCCTTCTCTCGGGGTGAACATCCAGATTGTGGGGGATGACTTG  
ACAGTCACCAACCCCAAGAGGATTGCCAGGCGGTTGAGAAGAAGGCCTGCAACTGTCTG  
CTGCTGAAGGTCAACCAGATCGGCTCGGTGACCGAATCGATCCAGGCGTGCAAACTGGCT  
CAGTCTAATGGCTGGGGGTGATGGTGAGCCACCGCTCTGGGAGACTGAGGACACATTC  
ATTGCTGACCTTGTGGTGGGCTCTGCACAGGACAGATCAAGACTGGCGCCCCTGCCGC  
TCGGAGCGTCTGGCCAAATACAACCAACTCATGAGGATCGAGGAGGCTCTTGGGGACAAG  
GCAATCTTTGCTGGACGCAAGTCCGTAACCCGAAGGCCAAGTGA
```

Clone variation with respect to NM\_001976.4  
212 a=>g;254 t=>c



[View online »](#)

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_001976 unedited  
 TGTAATACGACTCACTATAGGGCGGCNCGCGATTCCGGCACGAGGCTCACTCACTCACAC  
 CTCCTGTCTGCAGCCATGGCCATGCAGAAAATCTTTGCCCGGAAATCTTGACTCCAG  
 GGGCAACCCACGGTGGAGGTGGACCTGCACACGGCCAAGGGCCGATTCCGAGCAGCTGT  
 GCCCAGTGGGGCTTCCACGGGTATCTATGAGGCTCTGGAATAAGAGACGGAGACAAAGG  
 CCGCTACCTGGGAAAGGAGTCTGAAGGCTGTGGAGAATCAACAGTACTCTGGGCC  
 TGCTCTGCTGCAAAAGAACTAAGCGTTGCGGATCAAGAAAAAGTTGACAAATTTATGAT  
 TGAGCTAGATGGGACCGAGAATAAGTCCAAGTTTGGGGCCAATGCCATCCTGGGCGTGTC  
 CTTGGCCGTGTGAAGGCGGGAGCAGCTGAGAAGGGGGTCCCCCTGTACCGCCACATCGC  
 AGATCTCGCTGGGAACCTGACCTCATACTCCCAGTGCCAGCCTTCAATGTGATCAACGG  
 GGGCTCCCATGCTGAAACAAGCTGGCCATGCAGGAGTTCATGATTCTGCCTGTGGGAGC  
 CAGCTCCTTCAAGGAAGCCATGCGCATTGGCGCCGAGGTCTACCACCACCTCAAGGGGT  
 CATCAAGGCCAAGTATGGGAAGGATGCCACCAATGTGGGTGATGAAGGTGGCTTCGCACC  
 CAACATCTGGAGAATGAGGCCCTGNAGCTGCTGAAGACGGCCATCCAGGCGGCTGGT  
 TACCCAGACAAGTGGTATNCGCATGGGATGTGCAGCATCTGAGTTCTATCGCAATGGG  
 AGTACGATCTTGACTTCACTGCGCTGATGATCCCGCACGCACATACTGGGAGAGCTCGG  
 AGACTGNATAGAGCTTATCAGAACATNCTGTGTC

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_001976 unedited  
 CTGGCCAGTGTTNTATTTTCAGGAAGCAGTCTGGNAGNACTGGGTCTGTCCAGTGGAGTC  
 CTGGAGCCTCCAGCTTCTCACTTGGCCTTCGGGTACGGAACTTGCCTCCAGCAAAGATT  
 GCCTTGTCCCAAGAGCCTCCTCGATCCTCATGAGTTGGTTGTATTTGGCCAGACGCTCC  
 GAGCGGCAGGGGGCGCCAGTCTTGATCTGTCTGTGCAGAGCCCCACCACAAGGTCAGCA  
 ATGAATGTGTCCTCAGTCTCCCCAGAGCGGTGGCTCACCATCACCCCCAGCCATTAGAC  
 TGAGCCAGTTTGCACGCCTGGATCGATTTCGGTACCCGAGCCGATCTGGTTGACCTTCAGC  
 AGCAGACAGTTGCAGGCCTTCTTCTCAACGGCCTGGGCAATCCTTTGGGGTTGGTGACT  
 GTCAAGTCATCCCCACAATCTGGATGTTACCCCCGAGAGGAAGGAGGTCCAAGTGGCC  
 CAGTCATCCTGGTCAAAGGGTCTTCGATGGAGACCACANGATAGTTCTTGATAAAGCTC  
 TTATACAGCTCTCCGAGCTTCTCCCCAGTATGTGCCGTGCGGGATCATCAGGCGACTTG  
 AAGTCAAGATCGTACTTNCATTGCGATAGAATCAGATGCTGCCACATCCATGCCGATC  
 ACCACCTTGTCTGGGTAACCAGCCGCTGGATGGCCGTCTCTAACAGCTCCAAGGCCTAA  
 TTGGTTTCCAAGATGCTGGGGGCAAAACCCCTTAATACCCACATTGGGGCATCCCTCC  
 CTACCTCGCCCTTGAGACCCCCCTGAGGGGGGGAGTACCTTCGGGCAATGCGAATGGG  
 CTTCTTGAAGACCTGCGCTCCACGGCGCAACCATCACCCCGCTTGCCCGCTTGCCCC  
 AACTGGCCCCCTCTACACCAATGCC

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_001976

**Insert Size:**

1560 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**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\\_001976.2](#), [NP\\_001967.1](#)

**RefSeq Size:** 1494 bp

**RefSeq ORF:** 1305 bp

**Locus ID:** 2027

**UniProt ID:** [P13929](#)

**Cytogenetics:** 17p13.2

**Domains:** enolase

**Protein Pathways:** Glycolysis / Gluconeogenesis, Metabolic pathways, RNA degradation

**Gene Summary:** This gene encodes one of the three enolase isoenzymes found in mammals. This isoenzyme is found in skeletal muscle cells in the adult where it may play a role in muscle development and regeneration. A switch from alpha enolase to beta enolase occurs in muscle tissue during development in rodents. Mutations in this gene have been associated with glycogen storage disease. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jul 2010]  
Transcript Variant: This variant (1) represents the longest transcript and encodes the longer isoform (1). Variants 1 and 2 encode the same protein.