

## Product datasheet for SC111031

### Transaldolase 1 (TALDO1) (NM\_006755) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Transaldolase 1 (TALDO1) (NM_006755) Human Untagged Clone
Tag:	Tag Free
Symbol:	Transaldolase 1
Synonyms:	TAL; TAL-H; TALDOR; TALH
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC111031 sequence for NM_006755 edited (data generated by NextGen Sequencing)

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ATGTCGAGCTCACCCGTGAAGCGTCAGAGGATGGAGTCCGCGCTGGACCAGCTCAAGCAG
TTCACCACCGTGGTGGCCGACACGGGCGACTTCCACGCCATCGACGAGTACAAGCCCCAG
GATGCTACCACCAACCCGTCCCTGATCCTGGCCGACGACAGATGCCCGCTTACCAGGAG
CTGGTGGAGGAGGCGATTGCCTATGGCCGGAAGCTGGGCGGGTCACAAGAGGACCAGATT
AAAAATGCTATTGATAAACTTTTTGTGTTGTTGGAGCAGAAATACTAAAGAAGATTCCG
GGCCGAGTATCCACAGAAGTAGACGCAAGGCTCTCCTTTGATAAAGATGCGATGGTGGCC
AGAGCCAGGCGGCTCATCGAGCTCTACAAGGAAGCTGGGATCAGCAAGGACCGAATTCTT
ATAAAGCTGTCAACCTGGGAAGGAATTCAGGCTGGAAGGAGCTCGAGGAGCAGCAC
GGCATCCACTGCAACATGACGTTACTCTTCTCCTTCGCCAGGCTGTGGCCTGTGCCGAG
GCGGGTGTGACCCATCTCCCCATTTGTTGGGCGCATCCTTGATTGGCATGTGGCAAAC
ACCGACAAGAAATCCTATGAGCCCCTGGAAGACCCTGGGGTAAAGAGTGTCACTAAAATC
TACAATACTACAAGAAGTTTAGCTACAAAACCATTGTCATGGGCGCCTCCTTCCGCAAC
ACGGGCGAGATCAAAGCACTGGCCGGCTGTGACTTCTCACCATCTCACCAAGCTCCTG
GGAGAGCTGTGCAGGACAACGCCAAGCTGGTGCCTGTGCTCTCAGCCAAGGCGGCCAA
GCCAGTGACCTGGAAAAATCCACCTGGATGAGAAGTCTTCCGTTGGTTGCACAACGAG
GACCAGATGGCTGTGGAGAAGCTCTCTGACGGGATCCGCAAGTTTGCCGCTGATGCAGTG
AAGCTGGAGCGGATGCTGACAGAACGAATGTTCAATGCAGAGAATGGAAGTAG

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Clone variation with respect to NM\_006755.1



[View online »](#)

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_006755 unedited  
 GTTCAAATTTGTATACGACTCCTATAGGCGGCCGCGNAATTCGCACGAGGCCTCGGTCTT  
 GCTATGTGCGAGCTCACCCGTGAAGCGTCAGAGGATGGAGTCCGCGCTGGACCAGCTCAAG  
 CAGTTCACCACCGTGGTGGCCGACACGGGCGACTTCCACGCCATCGACGAGTACAAGCCC  
 CAGGATGCTACCACCAACCCGTCCTGATCCTGGCCGACGACAGATGCCCGCTTACCAG  
 GAGCTGGTGGAGGAGCGATTGCCTATGGCCGGAAGCTGGGCGGGTCACAAGAGGACCAG  
 ATTAATAATGCTATTGATAAACTTTTTGTGTTGTTGGAGCAGAAATACTAAAGAAGATT  
 CCGGGCCGAGTATCCACAGAAGTAGACGCAAGGCTCTCCTTTGATAAAGATGCGATGGTG  
 GCCAGAGCCAGGCGGCTCATCGAGCTCTACAAGGAAGCTGGGATCAGCAAGGACCGAATT  
 CTTATAAAGCTGTCATCAACCTGGGAAGGAATTCAGGCTGAAAGGAGCTCGAGGAGCAG  
 CACGGCATCCACTGCAACATGACGTTACTTCTCCTTCGCCCAGGCTGTGGCCTGTGCC  
 GAGGCGGGTGTGACCCTCATCTCCCATTTGTTGGGCGCATCCTTGATTGGCATGTGGCA  
 AACACCGACAAGAAATCCTATGAGCCCCCTGGAGACCCTGNGGTANAGAGTGTACTAAA  
 ATCTACAATACTACAAGAAGTTTGTACTACAAAACCATTTGTCATGGGCGCCTCCTTCCG  
 CACACGGGCGAGATCAAAGCACTGCCCGGCTGTGACTTCTCACATCTCACCCAGCTCCT  
 GGGAGAGCTGCTCAAGACAACGCCAAGCTGTTGCCTGTGCTCTCAACCAAGGCGGCC  
 AGCCAGTGACCCTGGAAT

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_006755 unedited  
 TCTGGAACGCGGCACGCAATCTAGTATCGAGTTTTTTTTTTTTTTTTTTTGAACAGCACA  
 GAAAGTGACTGCTTTATGTATTAAGCAAAATTTACATAAAATCAGAAATCTATGATCT  
 GTCCCTGTCCAATTTGTAATAAACGCAAGATTCATCAGAAGCCACGTGCAGTCAGATCC  
 CAGCTGGCCGGCGGTGCAGATCTGGAGTCCAGCCTCAGGGATGCGCTACTTTCCATTCTC  
 TGCAATTGAACATTCGTTCTGTCAGCATCCGCTCCAGCTTCACTGCATCAGCGGCAAACTT  
 GCGGATCCCGTCAAGAGCTTCTCCACAGCCATCTGGTCTCGTTGTGCAACCAACGGAA  
 AGACTTCTCATCCAGGTGGATTTTTTCCAGGCTACTGGCTTGGGCGCCTTGGCTGAGAG  
 CACAGGCACCAGCTTGGCGTTGCTCTGCAGCAGCTCTCCAGGAGCTTGGGTGAGATGGT  
 GAGGAAGTACAGCCGGCCAGTGTCTTGTCTCGCCCGTGTGCGGAAAGAGGCGCCCAT  
 GACAATGGTTTTGTAGCTAAACTTCTTGTAGTAGTTGTAGATTTTATTGACACTTTTAC  
 CCCAGGGTCTTCCAGGGGCTCATATGATTTCTTGTGCGGTGTTGCCACATGCCAATCAAGG  
 ATGCGCCCCACATATGGGAGATGATGTTTACACCCCGCTCGGCACATGCCACAGCCTGG  
 GCGAAGGAGATAAGTACCGTCTGTTGCAATGGATGCGGGCTGCTCCTCGAGCTTCTTTT  
 CAGCCTGAATTCCTTCCAGGTGGATGACAGCTTTATTAAGAATTTGGTCCCTTGCTTGA  
 TCCAGCCTCCCTGGTANAACTCGATGAANCCGCCTTGCTTCTTGGCCACATCGGAATT  
 TTTATTAAGGAGAGCCTTGGGTTAACTTGGGGAACCTGGCCCGAATTTTCTCTTA  
 TTTTCTGTCCCAACACCACAAAAGTTTTTAATGCATTCTTTATCG

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_006755

**Insert Size:**

1270 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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_006755.1</a> , <a href="#">NP_006746.1</a>
<b>RefSeq Size:</b>	1319 bp
<b>RefSeq ORF:</b>	1014 bp
<b>Locus ID:</b>	6888
<b>UniProt ID:</b>	<a href="#">P37837</a>
<b>Cytogenetics:</b>	11p15.5
<b>Domains:</b>	Transaldolase
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Metabolic pathways, Pentose phosphate pathway
<b>Gene Summary:</b>	<p>Transaldolase 1 is a key enzyme of the nonoxidative pentose phosphate pathway providing ribose-5-phosphate for nucleic acid synthesis and NADPH for lipid biosynthesis. This pathway can also maintain glutathione at a reduced state and thus protect sulfhydryl groups and cellular integrity from oxygen radicals. The functional gene of transaldolase 1 is located on chromosome 11 and a pseudogene is identified on chromosome 1 but there are conflicting map locations. The second and third exon of this gene were developed by insertion of a retrotransposable element. This gene is thought to be involved in multiple sclerosis. [provided by RefSeq, Jul 2008]</p>