

Product datasheet for **RG204049**

Transaldolase 1 (TALDO1) (NM_006755) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Transaldolase 1 (TALDO1) (NM_006755) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Transaldolase 1
Synonyms:	TAL; TAL-H; TALDOR; TALH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG204049 representing NM_006755 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCGAGCTCACCCGTGAAGCGTCAGAGGATGGAGTCCGCGCTGGACCAGCTCAAGCAGTTCACCACCG
TGGTGGCCGACACGGGCGACTTCCACGCCATCGACGAGTACAAGCCCCAGGATGCTACCACCAACCCGTC
CCTGATCCTGGCCGACGACAGATGCCCGCTTACCAGGAGCTGGTGGAGGAGCGGATTGCCTATGGCCGG
AAGCTGGGCGGGTACAAGAGGACCAGATTAATAATGCTATTGATAAACTTTTTGTGTTGTTGGAGCAG
AAATACTAAAGAAGATCCGGGCGGAGTATCCACAGAAGTAGACGCAAGGCTCTCCTTTGATAAAGATGC
GATGGTGGCCAGAGCCAGGCGGCTCATCGAGCTCTACAAGGAAGCTGGGATCAGCAAGGACCGAATTCCT
ATAAAGCTGTCAACCTGGGAAGGAATTCAGGCTGGAAGGAGCTCGAGGAGCAGCACGGCATCCACT
GCAACATGACGTTACTCTTCTCCTTCGCCAGGCTGTGGCCTGTGCCGAGGCGGGTGTGACCCTCATCTC
CCCATTGTTGGGCGCATCCTTGATTGGCATGTGGCAAACACCGACAAGAAATCCTATGAGCCCCGGAA
GACCCTGGGGTAAAGAGTGTCACTAAAATCTACAACACTACAAGAAGTTTAGCTACAAAACCATTTGCA
TGGGCGCCTCCTCCGCAACACGGGCGAGATCAAAGCACTGGCCGGCTGTGACTTCTCACCATCTCACC
CAAGCTCCTGGGAGAGCTGCTGCAGGACAACGCCAAGCTGGTGCCTGTGCTCTCAGCCAAGGCGGCCAA
GCCAGTGACCTGGAAAAATCCACCTGGATGAGAAGCTTTCCGTTGGTTGCACAACGAGGACCAGATGG
CTGTGGAGAAGCTCTGACGGGATCCGCAAGTTTGCCGCTGATGCAGTGAAGCTGGAGCCGATGCTGAC
AGAACGAATGTTCAATGCAGAGAATGGAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG204049 representing NM_006755
 Red=Cloning site Green=Tags(s)

MSSSPVKRQRMESALDQLKQFTTVVADTGDFHAIDEYKPQDATTNPSLILAAAQMPAYQELVEEAIAYGR
 KLGGSQEDQIKNAIDKLFVLFGAIEILKKIPGRVSTEVDARLSFDKAMVARARRLIELYEAGISKDRIL
 IKLSSTWEGIQAGKELEEQHGHCNMTLLFSFAQAVACAEAGVTLISPFVGRILDWHVANTDKKSYEPLE
 DPGVKSVTKIYNYKKFSYKTIVMGASFRTGEIKALAGCDFLTISPKLLGELLQDNAKLVPVLSAKAAQ
 ASDLEKIHLDKESFRWLHNEQMAVEKLSDGIRKFAADAVKLERMLTERMFNAENK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006755

ORF Size: 1011 bp

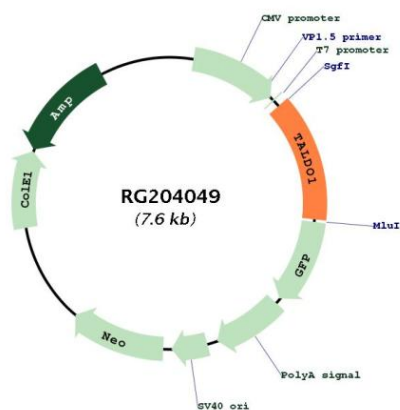
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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).

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_006755.2
RefSeq Size:	1319 bp
RefSeq ORF:	1014 bp
Locus ID:	6888
UniProt ID:	P37837
Cytogenetics:	11p15.5
Domains:	Transaldolase
Protein Families:	Druggable Genome
Protein Pathways:	Metabolic pathways, Pentose phosphate pathway
Gene Summary:	<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>

Product images:



Circular map for RG204049