

Product datasheet for **RG216599**

Trehalase (TREH) (NM_007180) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Trehalase (TREH) (NM_007180) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	TREH
Synonyms:	TRE; TREA; TREHD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG216599 representing NM_007180
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCAGGGAGGACCTGGGAGCTGTGCCTGCTACTGCTGCTGGGGCTGGGACTGGGGTCCCAGGAGGCC
 TACCCCCACCCTGTGAGAGTGAGATTTACTGCCACGGGGAGCTCCTAAACCAAGTTCAAATGGCCAAGCT
 CTACCAGGATGACAAGCAGTTTGTGGACATGCCACTGTCTATAGCTCCAGAAACAGTCTGCAGACCTTC
 ACTGAGCTGTCCAGGGACCACAATCACAGCATCCCCAGGGAGCAGCTGCAGGCGTTTGTCCACGAACACT
 TCCAGGCCAAGGGCAGGAGCTGCAGCCCTGGACCCTGCAGACTGGAAAGACAGCCCCCAGTTCCTGCA
 GAAGATTTAGATGCCAACTGCGTGCCTGGGCAGGGCAGCTGCATCAGCTCTGGAAGAAGCTGGGGAAG
 AAGATGAAGCCAGAGTTCTCAGCCACCCTGAGCGTTCTCTCATATACTCAGAACATCCTTTCATTG
 TGCTGGCGGTGCTTTTGTGAGTTCTACTACTGGGACTCCTACTGGGTCATGGAGGCTGCTCCTCTC
 AGAGATGGCTGAGACGGTGAAGGCATGCTGCAGAACTTCTTGGACTGGTGA AACCTATGGGCATGTC
 CCCAATGGTGGGCGCTGTACTACTTGCAGCGGAGCCAGCCCCACTCTTGACCCTCATGATGGATTGCT
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 GCCTTCTATGCCAAGCAGAGGAGCTGATGAGCAACTTCTATCCAGGCTGGGGAACGACTCCCAGGCCA
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 TCCTGACTTACCAGTATGGGATCCCGACTCTCTCCAGAAGACAGGCCAGCAGTGGGATTTCCCAATGC
 CTGGGCCCCCTGCAGGACTTGGTCATCAGAGGCTGGCCAAGGCACCTTACGTCGGGCCAGGAAGTG
 GCTTCCAGCTGGCTCAGAATTGGATCCGAACCAATTTTGTGCTACTCGCAGAAGTACGACATGTATG
 AGAAGTATGACGTCAGCAACGGTGGACAGCCCGTGGGGAGGAGAATATGAAGTTCAGGAGGGATTTGG
 CTGGGACGAAGGTGTGGTCTGATGCTGCTGGACCGCTATGGTACCGGCTGACCTCAGGGCCAAGCTG
 GCTTCTGGAGCCCCACTGCTGGCGGCCACCCTTCTGCCAGCCTCCTGCTCAGCCTCCTGCCATGG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG216599 representing NM_007180
 Red=Cloning site Green=Tags(s)

MPGRTWELCLLLLLLGLGLGSQEALPPPCESEIYCHGELLNQVQMAKLYQDDKQFVDMPLSLIAPEQVLQTF
 TELSRDHNSIPREQLQAFVHEHFQAKGQELQPWTPADWKDSPQFLQKISDAKLRAWAGQLHQLWKKLGK
 KMKPEVLSHPERFSLIYSEHPFIVPGGRFVEFYWDSYWMEGLLLSEMAETVKGMLQNFLLDKVTKYGHV
 PNGGRVYYLQRSQPPLLTLMMDCYLTHNTDAFLQENIETLALDFWTKNRTVSVSLEGKNYLLNRYVY
 PYGGPRPESYSKDVELADTLPEGDREALWAEKAGAESGWDFSSRWLIGGPNPNSLSGIRTSKLVVDLN
 AFLCQAEELMSNFYSRLGNSQATKYRILRSQRLAALNTVLWDEQTGAWFYDLEKKNREFYPSNLTP
 LWAGCFSDPGVADKALKYLEDNRILTYQYGIPTSLQKTGGQWDFPNAWAPLQDLVIRGLAKAPLRAQEV
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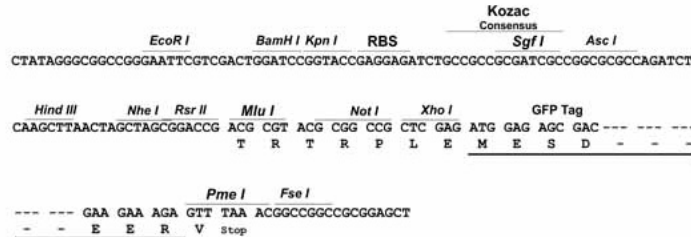
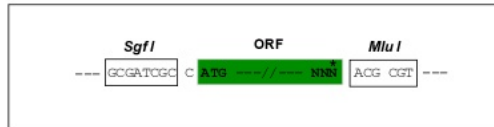
TRTRPLE – GFP Tag – V

Restriction Sites:

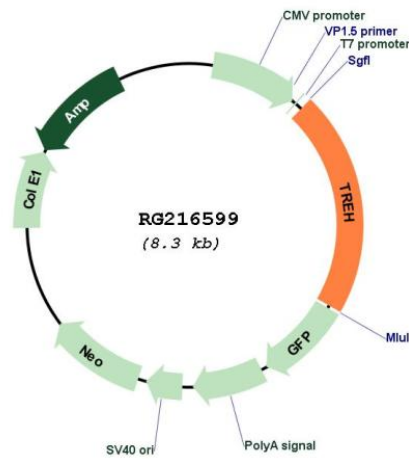
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_007180
 ORF Size: 1749 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_007180.1 , NP_009111.1
RefSeq Size:	1854 bp
RefSeq ORF:	1752 bp
Locus ID:	11181
UniProt ID:	O43280
Cytogenetics:	11q23.3
Protein Pathways:	Starch and sucrose metabolism
Gene Summary:	This gene encodes an enzyme that hydrolyses trehalose, a disaccharide formed from two glucose molecules found mainly in fungi, plants, and insects. A partial duplication of this gene is located adjacent to this locus on chromosome 11. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2014]