

Product datasheet for **RG217931**

Transglutaminase 6 (TGM6) (NM_198994) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | Transglutaminase 6 (TGM6) (NM_198994) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | TGM6 |
| Synonyms: | dj734P14.3; SCA35; TG6; TGM3L; TGY |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



[View online »](#)

ORF Nucleotide
Sequence:

>RG217931 representing NM_198994
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGGATCGCC

ATGGCAGGGATCAGAGTACCAAGTGGACTGGCAGCGGTGAGGAATGGCGCTGCCACACACCCAGG
AGTACCCCTGCCCTGAGCTGGTGGTTCGCAGGGGCCAGTCGTTTCAGCCTCACGCTGGAGCTGAGCAGAGC
CCTGGACTGTGAGGAGATCCTCATCTTACGGTGGAGACAGGACCCCGGGCTTCTGAGGCCCTCCACACC
AAAGCTGTGTTCCAGACATCGGAGCTGGAGCGGGTGGAGGCTGGACAGCAGCAAGGGAGGCTCAGATGG
AGAAAACCTGACCGTCACTCTCGCCAGCCCTCCAGTGTGTCATTGGCCGCTACCTGCTGAGCATCAG
GCTTCTCTCACCGCAAACACAGCAACCGGAGGCTGGGCGAGTTTGTCTCTTTCAACCCATGGTGT
GCAGAGGACGATGTGTTCTGGCCTCAGAGGAGGAGACAGGAGTACGTGCTCAGCGACAGCGGCATCA
TCTCCGAGGCGTGGAGAAGCACATACGAGCCCAGGGCTGGAACACGGGCAGTTTGGAGGACATCCT
GAACATCTGCCTCTCCATCCTGGATCGAAGCCCCGGTACCAAAAACAACCCAGCCACCGAGCTGTCTGC
CGCCACAACCCCATCTAGCTCACCAGGGTCATCAGTGCCATGGTGAACAGCAACAACGACCGAGGTGTGG
TGCAAGGACAGTGGCAGGGCAAGTACGGCGGGCCAGCCCGCTGCACTGGCGCGGCAGCGTGGCCAT
TCTGCAGAAGTGGCTCAAGGGCAGGTACAAGCCAGTCAAGTACGGCCAGTGTGGGTCTTCGCCGGAGTC
CTGTGCACAGTCTCAGGTGCTTGGGGATAGCCACACGGGTGCTGTCCAACCTCAACTCAGCCCACGACA
CAGACCAGAACCTGAGTGTGGACAAATACGTGGACTCCTTCGGGCGGACCTGGAGGACCTGACAGAAGA
CAGCATGTGGAATTTCCATGTCTGGAATGAGAGCTGGTTTGCCTGGCAGGACCTAGGCCCTCTTACAAT
GGCTGGCAGGTTCTGGATGCCACCCCCAGGAGGAGAGTGAAGGTGTGTTCCGGTGGCCCGCAGCCTCAG
TCACCGCATCCGCGAGGGTGATGTGCACCTGGCTCAGATGGCCCTTCGTGTTTGGGAGGTCAACGC
CGACTACATCACCTGGCTGTGGCACGAGGATGAGAGCCGGGAGCGTGTATACTCAAACACGAAGAAGATT
GGGAGATGCATCAGCACCAAGGCGGTGGCAGTACTCCCGCTGGACATCACTGACCTCTACAAGTATC
CGGAAGGGTCCCGAAAGAGAGGCGAGGTGTACAGCAAGGCGGTGAACAGGCTGTTCCGGCTGGAAGCCTC
TGGAAGGAGAATCTGGATCCGCGAGGGTGGGGTCTGCTCTGGCGTGACGACCTCCTGGAGCCTGCC
ACCAAGCCAGCATCGCTGGCAAGTTCAAGGTGCTAGAGCCTCCCATGCTGGGCCACGACCTGAGACTGG
CCCTGTGCTTGGCCAACCTCACCTCCCGGGCCAGCGGTGAGGGTCAACCTGAGCGGTGCCACCATCCT
CTATACCCGCAAGCCAGTGGCAGAGATCCTGCATGAATCCACGCCGTGAGGCTGGGCGCCGAAGAAGAG
AAGAGAATCCCAATTACAATATCTTACTCTAAGTATAAAGAAGACCTGACAGAGGACAAGAAGATCCTGT
TGGCTGCCATGTGCTTGTACCAAAAGGAGAGAAGCTTCTGGTGGAGAAGGACATTACTCTAGAGGACTT
CATCACCATCAAGTTCTGGGCCAGCCATGGTGGGAGTGGCAGTTACAGTGGAAAGTGCAGTAGTCAAC
CCCCTCATAGAGAGAGTGAAGGACTGTGCGCTGATGGTGGAGGGCAGCGGCTTCTCCAGGAACAGCTCA
GCATCGACGTGCCTACCTGGAGCCTCAGGAGAGGGCCTCAGTCCAGTTTGCATCACCCCTCCAAAAG
TGGCCAAAGGCAGCTGCAGGTGGACCTTGTAAAGCCCTCACTTCCCGGACATCAAGGGCTTTGTGATCGTC
CATGTGGCCACTGCCAAG

ACGCGTACGCGGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG217931 representing NM_198994
 Red=Cloning site Green=Tags(s)

MAGIRVTKVDWQSRNGAAHHTQEYPCPELVVRRGQSFSLTLELSRALDCEEILIFTVETGPRASEALHT
 KAVFQTSELERGEGWTAAREAQMEKTLTVSLASPPSAVIGRYLLSIRLSSHRKHSNRRLGEFVLLFNPWC
 AEDDVFLASEEERQEYVLSDSGIIFRGVEKHIRAOGWNYGQFEEDILNICLSILDRSPGHQNNPATDVSC
 RHNPIYVTRVISAMVNSNDRGVVQGWQGKYGGTSPLHWRGSAVAILQKWLKGRYKPKYQGCWVFAGV
 LCTVLRCLGIATRVSNFNSAHDTDQNLVVDKYVDSFGRTLEDLTEDSMWNFHVWNESWFARQDLGPSYN
 GWQVLDATPQEESEGVFRCGPASVTAIREGDVHLAHDGPFVFAEVNADYITWLWHEDESRRVYSNTKKI
 GRCISTKAVGSDSRVDITDLKYPEGSRKERQVYSKAVNRLFGEASGRRIWIRRAGGRCLWRDDLLEPA
 TKPSIAGKFKVLEPPMLGHDRLALCLANLTSRAQRVRVNLSGATILYTRKPAEILHESHAVRLGPQEE
 KRIPITISYSKYEDLTEDKKILLAAMCLVTKGEKLLVEKDITLEDFITIKVLPAMVGVAVTVEVTVVN
 PLIERVKDCALMVEGSGLLQEQLSIDVPTLEPQERASVQFDITPSKSGPRQLQVDLVSPHFPDIKGFVIV
 HVATAK

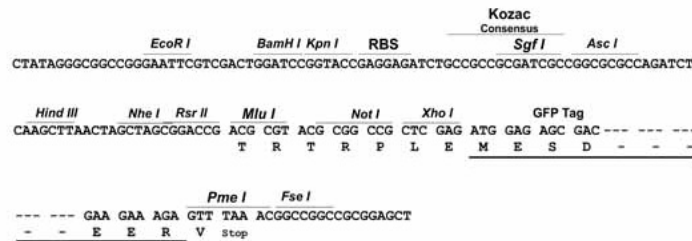
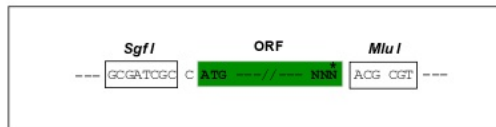
TRTRPLE - GFP Tag - V

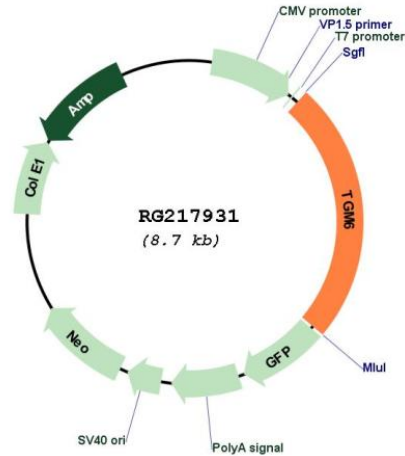
Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_198994

ORF Size: 2118 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:

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_198994.1](#), [NP_945345.1](#)

RefSeq Size: 2292 bp

RefSeq ORF: 2121 bp

Locus ID: 343641

UniProt ID: [O95932](#)

Cytogenetics: 20p13

Protein Families: Druggable Genome

Gene Summary: The protein encoded by this gene belongs to the transglutaminase superfamily. It catalyzes the cross-linking of proteins and the conjugation of polyamines to proteins. Mutations in this gene are associated with spinocerebellar ataxia type 35 (SCA35). Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2011]