

Product datasheet for **SC319444**

Transglutaminase 2 (TGM2) (NM_198951) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Transglutaminase 2 (TGM2) (NM_198951) Human Untagged Clone
Tag:	Tag Free
Symbol:	Transglutaminase 2
Synonyms:	G(h); hTG2; TG(C); TGC; tTG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene sequence for NM_198951.1
 CTCCGCCTCGGCAGTGCCAGCCGCCAGTGGTCGCACTTGGAGGGTCTCGCCGCCAGTGGGA
 AGGAGCCACCGCCCCCGCCGACCATGGCCGAGGAGCTGGTCTTAGAGAGGTGTGATCTG
 GAGCTGGAGACCAATGGCCGAGACCACCACACGGCCGACCTGTGCCGGGAGAAGCTGGTG
 GTGCGACGGGGCCAGCCCTTCTGGCTGACCCTGCACTTTGAGGGCCGCAACTACGAGGCC
 AGTGTAGACAGTCTCACCTTCAGTGTGACCGGCCAGCCCTAGCCAGGAGGCCGGG
 ACCAAGGCCCGTTTTCCACTAAGAGATGCTGTGGAGGAGGGTACTGGACAGCCACCGTG
 GTGGACCAGCAAGACTGCACCCTCTCGCTGCAGCTCACCAACCCCGCCAACGCCCCCATC
 GGCTGTATCGCCTCAGCCTGGAGGCCTCCACTGGCTACCAGGGATCCAGCTTTGTGCTG
 GGCCACTTCATTTTGTCTTCAACGCCTGGTGCCAGCGGATGCTGTGTACCTGGACTCG
 GAAGAGGAGCGGCAGGAGTATGTCCTCACCCAGCAGGGCTTTATCTACCAGGGCTCGGCC
 AAGTTCATCAAGAACATACTTGGAAATTTGGGCAGTTTGAAGATGGGATCCTAGACATC
 TGCCTGATCCTTCTAGATGTCAACCCCAAGTTCCTGAAGAACGCCGGCCGTGACTGCTCC
 CGCCGACGAGCCCGTCTACGTGGGCCGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT
 GACCAGGGTGTGCTGCTGGGACGCTGGGACAACAACACTACGGGGACGGCGTCAGCCCATG
 TCCTGGATCGGCAGCGTGGACATCCTGCGGCGCTGGAAGAACCACGGCTGCCAGCCGCTC
 AAGTATGGCCAGTGTGGTCTTCGCGCCCGTGGCCTGCACAGTGTGAGGTGCCTGGGC
 ATCCCTACCCGCGTCTGACCAACTACAACCTCGGCCCATGACCAGAACAGCAACCTTCTC
 ATCGAGTACTTCCGCAATGAGTTTGGGAGATCCAGGGTGACAAGAGCGAGATGATCTGG
 AACTTCCACTGCTGGGTGGAGTCGTGGATGACCAGGCCGACCTGCAGCCGGGGTACGAG
 GGCTGGCAGGCCCTGGACCCAACGCCCCAGGAGAAGAGCGAAGGGACGTACTGCTGTGGC
 CCAGTTCAGTTCGTGCCATCAAGGAGGGCGACCTGAGCACCAGTACGATGCGCCCTTT
 GTCTTTGCGGAGGTCAATGCCGACGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT
 CACAAATCCATCAACCGTCCCTGATCGTTGGGCTGAAGATCAGCACTAAGAGCGTGGGC
 CGAGACGAGCGGGAGGATATCACCCACACCTACAATACCCAGAGGGGTCTCAGAGGAG
 AGGGAGGCCTTACAAGGGCGAACACCTGAACAACTGGCCGAGAAGGAGGAGACAGGG
 ATGGCCATGCGGATCCGTGTGGGCCAGAGCATGAACATGGGCAGTACTTTGACGCTTTT
 GCCCACATACCAACAACACCGCTGAGGAGTACGTCTGCCGCTCCTGCTGTGCCCCG
 ACCGTGAGTACAATGGGATCTTGGGGCCGAGTGTGGCACCAGTACCTGCTCAACCTC
 AACCTGGAGCCTTCTCTGGTAAAGCCCTGTGTTCTGGAGCATTGTTGACCGCCAAC
 GACAACATGCTAGGTAGTGACCTAAAAAAAAAAAAAAAAAAAA

Restriction Sites: Please inquire

ACCN: NM_198951

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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_198951.1](#), [NP_945189.1](#)

RefSeq Size: 1879 bp

RefSeq ORF: 1647 bp

Locus ID: 7052

UniProt ID: [P21980](#)

Cytogenetics: 20q11.23

Protein Families: Druggable Genome

Protein Pathways: Huntington's disease

Gene Summary: Transglutaminases are enzymes that catalyze the crosslinking of proteins by epsilon-gamma glutamyl lysine isopeptide bonds. While the primary structure of transglutaminases is not conserved, they all have the same amino acid sequence at their active sites and their activity is calcium-dependent. The protein encoded by this gene acts as a monomer, is induced by retinoic acid, and appears to be involved in apoptosis. Finally, the encoded protein is the autoantigen implicated in celiac disease. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]
Transcript Variant: This variant (2) differs in the 3' UTR and coding region compared to variant 1. The resulting isoform (b) is shorter and has a unique C-terminus compared to isoform a.