

## Product datasheet for **SC303457**

### Transglutaminase 5 (TGM5) (NM\_004245) Human Untagged Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids  |
| Product Name:             | Transglutaminase 5 (TGM5) (NM_004245) Human Untagged Clone |
| Tag:                      | Tag Free   |
| Symbol:                   | TGM5   |
| Synonyms:                 | PSS2; TGASE5; TGASEX; TGM6; TGMX; TGX                      |
| Mammalian Cell Selection: | Neomycin   |
| Vector:                   | pCMV6-Entry (PS100001)                                     |
| E. coli Selection:        | Kanamycin (25 ug/mL)                                       |



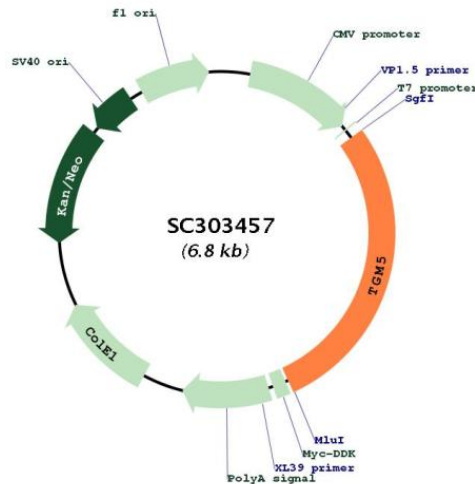
[View online »](#)

**Fully Sequenced ORF:** >SC303457 representing NM\_004245.  
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

```

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCACGATCGCC
ATGGCCAAGGGCTAGAAGTGGCCCTCACAGACCTCCAGAGCTCCAGAAATAATGTGCGGCACCACAG
GAGGAGATCACTGTGGACCACCTGCTTGTTCGCCGGGGCCAGGCCTTCAACCTCACCTGTACTTCAGG
AACCGGAGCTTCCAGCCAGGCCCTGGACAACATCATCTTCGTGGTTGAAACTGAGGATGCTGTCTACTTG
GACAGTGAACCCAGAGGCAGGAGTATGTCATGAATGATTATGGCTTCATCTACCAAGGCAGCAAGAAC
TGGATCCGCCATGTCCCTGGAACATGGACAGTTTGAAGACAAAATCATAGACATCTGCCTGAAGCTG
CTAGACAAGAGCCTGCACCTCCAGACTGACCCAGCCACAGACTGTGCTCTGCGGGGAAGCCCGTCTAC
GTCAGCAGAGTGGTGTGTGCCATGATCAACAGCAATGATGATAATGGGGTCTCAATGGAAGCTGGAGT
GAGAATTACACAGACGGCGCCAACCTGCCGAGTGGACGGGCAGCGTGGCCATCCTGAAGCAGTGGAAC
GCCACAGGCTGCCAGCCCGTGCCTACGGGCAATGCTGGGTCTTTGCTGCCGTATGTGCACAGTGTG
AGGTGTCTGGGGATCCCTACCCGTGTGATCACCAACTTCGACTCTGGCCAGGATACAGATGGAACTG
ATCATAGATGAGTATTATGACAACACAGGCAGGATTTTGGGGAATAAGAAGAAGGATACTATCTGGAAC
TTCCATGTCTGGAATGAGTGTGGATGGCCCGGAAGGATCTGCCCCCTGCATATGGAGGCTGGCAGGTG
CTGGACGCCACACCTCAGGAGATGAGCAACGGCGTCTACTGCTGTGGCCCTGCCTCTGTCAGAGCCATC
AAAGAAGGAGAAGTGGACCTGAACTATGACACGCCCTTTGTGTTTTCGATGGTGAATGCTGACTGCATG
TCCTGGCTCGTCCAGGGAGGGAAGGAGCAGAAGCTTACCAGGACACGAGTTCTGTTGGCAATTTTATC
AGCACAAAGAGCATCCAGAGTGACGAGCGGGATGACATCACAGAGAACTACAAGTATGAAGAAGGATCC
CTCCAGGAGAGGCAGGTGTTTCTGAAGGCTCTGCAGAAGCTGAAGGCTAGAAGCTTCCATGGCTCCCAA
AGAGGAGCAGAGTTGCAACCTTCCAGGCCACATCACTGAGCCAGGACAGCCCTCGGAGCCTGCATACA
CCTTCCCTTCGACCCAGTATGTGGTGCAAGTCTCCCTGAAATTAAGCTGCTCGACCCGCCCAACATG
GGCCAGGATATATGCTTTGCTCTGCTGGCCCTCAACATGTCTCCAGTTCAAGGACCTCAAAGTGAAC
CTGAGTGCCAGTCTCTGCTGCACGATGGCAGCCCTGTCCCCATTCTGGCAGGACACAGCGTTTCATC
ACACTCTCTCCTAAAGAAGCAAAGACCTACCCCTGCAAAATCTCCTATTCCAGTACAGCCAGTACCTG
TCAACAGACAAGCTGATCCGCATCAGTGCCTGGGTGAAGAGAAAAGCAGTCTGAGAAAATCCTGGTG
AACAGATCATCACCTTATCTTATCCAAGCATCACGATTAATGTTCTAGGAGCAGCCGTTGTGAACCAG
CCACTCTCCATACAGGTGATATTTCAAACCCCTCTCGGAGCAGGTTGAGGACTGTGTGCTGACTGTG
GAAGGAAGTGGCCTCTTCAAGAAACAGCAGAAAGTCTTCTTGGAGTCTCAAACCCCAACACCAAGCA
AGCATATTCTGGAGACCGTCCCCTTCAAGAGTGGACAAAGGCAGATCCAAGCTAATATGAGAAGCAAC
AAGTTTAAAGGACATTAAGGGTTACAGGAATGTTTATGTAGACTTTGCATTAATAA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
  
```

**Restriction Sites:** SgfI-MluI

**Plasmid Map:**


**ACCN:** NM\_004245

**Insert Size:** 1917 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).

**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\\_004245.3](#)

**RefSeq Size:** 2531 bp

**RefSeq ORF:** 1917 bp

**Locus ID:** 9333

**UniProt ID:** [O43548](#)

**Cytogenetics:** 15q15.2

**Protein Families:** Druggable Genome

**MW:** 71.9 kDa

**Gene Summary:** This gene encodes a member of the transglutaminase family. The encoded protein catalyzes formation of protein cross-links between glutamine and lysine residues, often resulting in stabilization of protein assemblies. This reaction is calcium dependent. Mutations in this gene have been associated with acral peeling skin syndrome. [provided by RefSeq, Oct 2009]  
Transcript Variant: This variant (2) lacks an alternate in-frame exon in the 5' coding region, compared to variant 1. This results in a shorter protein (isoform 2, also referred to as the short form), compared to isoform 1.