

Specifications:

Gene:	hTGM5
Accession:	AAI19010.1
Insert size:	2175bp
Concentration:	10µg at 0.2µg/µL

Description

This shuttle vector contains the complete ORF for the gene of interest, along with a Kozak consensus sequence for optimal translation initiation. It is inserted NotI to AscI. The gene insert is flanked with convenient multiple cloning sites which can be used to easily cut and transfer the gene cassette into your desired expression vector.

Preparation and Storage

Formulation	cDNA is provided in 10 mM Tris-Cl, pH 8.5
Shipping	Ships at ambient temperature
Stability	1 year from date of receipt when stored at -20°C to -80°C
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

hTGM5 cDNA Plasmid

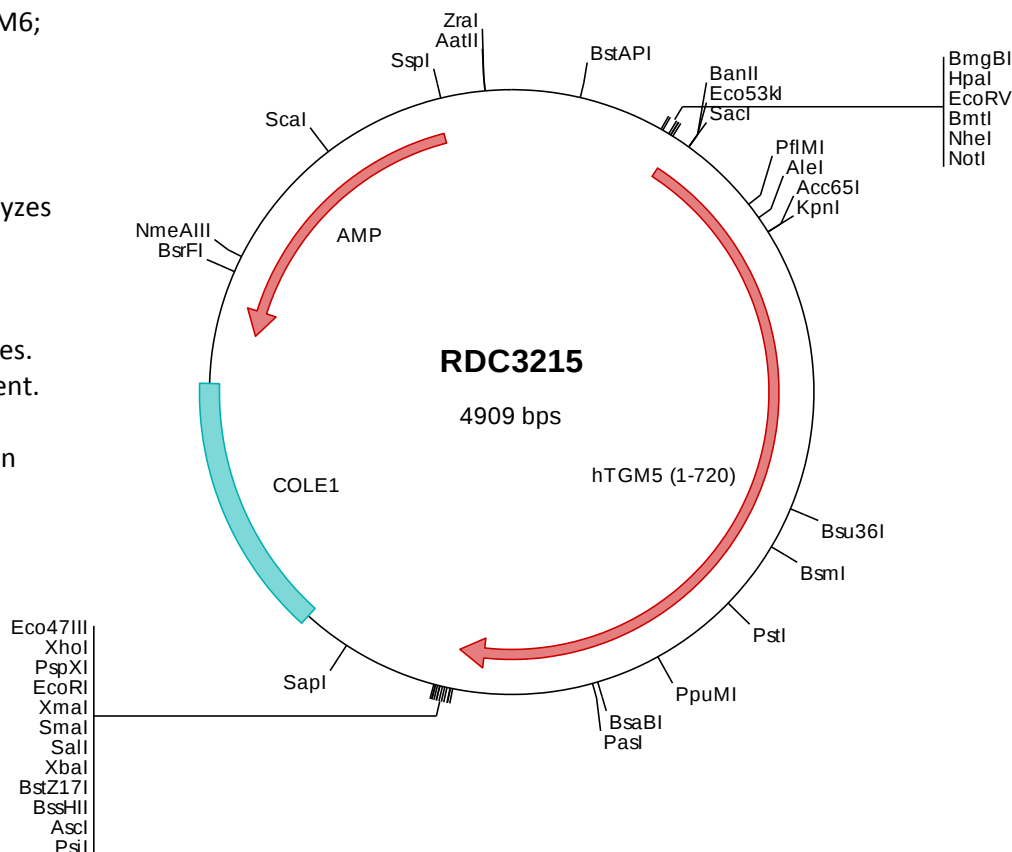
TGM5 transglutaminase 5

[*Homo sapiens* (human)]

Also known as: TGX; PSS2; TGM6; TGMX; TGASE5; TGASEX

Summary:

TGM5 is a member of the transglutaminase family. It 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 TGM5 have been associated with acral peeling skin syndrome.



FOR RESEARCH USE ONLY

NOT FOR USE IN HUMANS

> RDC3215 Plasmid DNA Sequence

```

1  tcgcgcgcttt  cggatgatgac  ggtgaaaacc  tctgacacat  gcagctcccc  gagacgggtca  cagcttgtct  gtaagcggat  gccgggagca  gacaagcccg
101  tcaggggcgcg  tcagcgggtg  ttggcgggtg  tcggggctgg  ctttaactatg  cggcatcaga  gcagattgta  ctgagagtgc  accatatgcg  gtgtgaaata
201  ccgcacacgat  gcgtaaggag  aaaataccgc  atcaggcgcc  attcgccatt  caggctgcgc  aactgttggg  aagggcgatc  ggtgcgggcc  tcttcgctat
301  tacgccagct  ggcgaaagg  ggaatgtgtg  caaggcgatt  aagttgggta  agcccgagg  tttcccgatc  acgacgttgt  aaaacgacgg  ccagtgaatt
401  ggagacgtgt  taacaagctt  ggatccgata  tcgctagcgc  ggccggccacc  atggcccaag  ggctagaagt  ggccctcaca  gacctcaga  gctccagaaa
501  taatgtgctgg  caccacacgg  aggagatcac  tgtggaccac  ctgcttgttc  gccggggcca  ggccctcaac  ctacccctgt  acttcaggaa  ccggagcttc
601  cagccaggcc  tggacaacat  catcttcgtg  gttgaaactg  gacgcgtgcc  agacctggcc  ttggggactc  gggctgtgtt  cagcctggca  cgccatcaca
701  gcccagcccc  ctgatttgc  ttgctggaga  ccaatggggc  cacctccaca  gaggtagct  tgtcgctcc  tcccacggcg  gccgtgggtc  ggtacotctt
801  gaaaatccac  atcgactcct  tccaggggtc  tgtgacggcc  taccagctag  gggagttoat  cctgcttttc  aatccctggt  gccagagga  tgcgtctac
901  ttggcacagt  aaccccagag  gcaggagtat  gtcatgaatg  attatggctt  catctacca  gccagcaaga  actggatccg  cccatgtccc  tggaaatatg
1001  gacagtttga  agacaaaatc  atagacatct  gcctgaagct  gctagacaag  agcctgcaat  tccagactga  cccagccaca  gactgtgtct  tgcggggaag
1101  ccccgcttac  gtcagcagag  ttgtgtgtgc  catgatcaac  agcaatgatg  ataattgggt  gctcaatgga  aactggagtg  agaattacac  agacggcgcc
1201  aacotcgcgg  agtggacggg  cagcgtggcc  atoctgaagc  agtggaaacg  cacagctgc  cagcccgctg  gctacgggca  atgctgggtc  ttgtctgcgc
1301  tcaatgtcac  agtgatgagg  tgtctgggga  tgtgatcccg  taccctgcag  aacttcgact  ctggccacga  tacagatgga  aactgatca  taactgcagt
1401  ttatgacaac  acaggcagga  ttttggggaa  taagaagaag  gatactatct  ggaacttoca  tgtctggaat  gagtgtgga  tggcccgga  ggaatctgcc
1501  cotgcatatg  gaggttgga  ggtgttgga  gccacacctc  aggagatgag  caacggcgct  taactgtgtg  gccctgctc  tgtcagagcc  atcaaaaga
1601  gagaagtgtg  cctgaactat  ttgtgttttc  gatggtgaat  gctgactgca  tgtcctggct  ctgcaggga  ggggaaggag  agaagcttca  taactgttca
1701  ccaggacacg  agttctgttg  gcaattttat  cagcacaagg  agcatccaga  gtgacgaggt  gatgacatc  acagagaact  acaagtatga  agaagtatcc
1801  ctccaggaga  ggcagggtgt  tctgaaggct  ctgcagaagc  tgaaggctag  aagcttccat  ggctcccaa  gaggagcaga  gttgcaactc  tccaggccca
1901  catcaactgt  ccaggacacg  cctgcagacc  tgcatacacc  gctccttoga  accagtgtg  tgggtcaagt  ctccctgaaa  tccaagtgtc  tcgaccgcgc
2001  caacatgggc  caggatatat  gctttgtcct  gctggccctc  aacatgtcct  cccagttoaa  ggacctcaaa  gtgaacctga  gtgcccagtc  tctgtctgac
2101  gatggcagcc  cctgtcccc  attctggcag  gacacagctg  tcatcacact  cctctctaaa  gaagcaaga  cctaccctgt  caaaatctcc  taactccagt
2201  acagccagta  cctgtcaaca  gacaagctga  tcgcatacag  tgcctgggt  gaagaaaaa  gcagtcctga  gaaaatctgt  gtaaacaga  tcatcaacct
2301  atcttatcca  agcatcaca  ttaattgtct  aggagcagcc  gttgtgaacc  agccactctc  catacaggtg  atattttcaa  accccctctc  ggaagcaggt
2401  gaggactgtg  tgcctgactgt  ggaaggaaat  ggcctcttca  agaaacagca  gaaagtcttc  cttggagtcc  taaaaccoca  acccaagta  agcatcttc
2501  tggagacgtg  ccccttcaag  agtggacaaa  ggcagatcca  agctaaatga  agaagcaaca  agtttaagga  cattaagggt  tacaggaaat  tttatgtaga
2601  ctttgcatta  taaggcgccg  cagtatactc  tagagtgcac  acccggggaa  ttctcgagc  gctgtctct  agcttggcgt  aatcatggtc  atagctgttt
2701  cctgtgtgaa  attgttatcc  gccacaatt  ccacacaaca  ccagcgggaa  cctgtctgct  aatgaatcgg  ccaacgcgcg  gggagaggcg  gtttgcgtat
2801  taattgcgtt  ggcctcactg  ccgcgtttcc  agctcggtaa  cctgtctgct  ggcgtgcatt  agcgggtatc  gctcactcaa  agcggttaat  acggttatcc
2901  tgggcgctct  tccgcttccc  cgtcactga  ctgcgtgcgc  tcggctgctt  ggcgtgcggc  aaccgtaaaa  aggcgcgctt  gctggcgttt  ttccatagcg
3001  agcaaatcag  gggataacgc  aggaagaac  atgtgagcaa  aaggccagca  aaaggccagg  cgaaccacca  caggactata  aagataccag  gcgtttcccc
3101  tccgcccccc  tgacgagcat  cacaaaaatc  gacgctcaag  tcagagggtg  cgaaccacca  ttccgggaag  gtggcgcttt  ctcaatgctc  acgctgtagg
3201  cctcgtgcgc  tctcctgttc  cgacctgcc  gcttaccgga  tactgtcccg  cctttctccc  cagcccgacc  gctgcgcctt  atccggtaac  tatcgtcttg
3301  tatctcaagt  cgggtgaggt  cgttcgctgt  cgttcgctgt  agccactggt  aacaggatta  gcagagcgag  gtatgtaggc  ggtgtctacg  agttcttgaa
3401  agtccaaccc  ggttaagcac  gacttatcgc  cactggcagc  agccactggt  ggtatctgct  cctctgtgaa  ttcggaaaaa  gagttgtag  ctctgtatcc
3501  tgggtggcct  aactacggct  acactagaag  gacagtattt  ggtatctgct  ctctgtgaa  gatctcaaga  gatctctttg  agatcctttt  atcttttcta
3601  ggcaaaacaaa  ccacgcgtgt  tagcgtgtgt  ttttttgttt  gcaagcagca  gattacgcgc  atagagattat  aatcagtgat  aatcagtgat  gcacctatct
3701  cggggtctga  cgctcagttg  aacgaaaaat  cagcttaagg  gatttttgct  atgagattat  aatcagtgat  aatcagtgat  gcacctatct  tctgtgcaat
3801  aagtttttaa  tcaatctaaa  gtatatatga  gtaaaacttg  tctgacagtt  accaatgctt  tctgtgcaat  tctgtgcaat  tttatccgcc  tccatccagt
3901  tcatccatag  ttgcctgact  cccgcgtgtg  tagataacta  cgatacggga  gggcttacca  gtcctgcaac  tttatccgcc  atcgtgtgtg  cagctcgtc
4001  caccggctcc  agatttatca  gcaataaacc  agccagccgg  aaggggccag  cgcagaagtg  gtcctgcaac  tttatccgcc  atcgtgtgtg  cagctcgtc
4101  ttgcccggaa  gctagagtaa  gtatgtcgcc  agttaatagt  ttgctgcaag  ttgttgccat  tgctacagcg  aaaaaagcgg  ttagctcctt  cggtcctccg
4201  gcttcattca  gctccggttc  ccaacgatca  aggcgagtta  catgatcccc  catgttgtgc  aaaaagcgg  ttagctcctt  cggtcctccg  cggtcctccg
4301  gaagtaagtt  ggcgcgagtg  ttatcactca  ttgttatggc  agcactgcat  atttctctta  ctgtcatgcc  atccgtaaga  tgctttctgt  tgactggtga
4401  gtactcaacc  aagtcattct  gagaatagt  tatgcggcga  cagagttgct  cttgcccggc  gtcaatacgg  gataataccg  cgccacatag  cagaacttta
4501  aaagtgtcck  tcaattggaa  acgtttcttc  gggcgaaaaa  tctcaaggat  ctaccgctgt  ttgagatcca  gttcgatgta  acccaactgt  gcaaccaact
4601  gatcttcagc  atcttttact  ttcaccagcg  tttctgggtg  agcaaaaaa  ggaaggcaaa  atgccgcaaa  aaagggaata  agggcgacac  ggaaatgttg
4701  aatactcata  ctcttctctt  ttcaatatta  ttgaagcatt  tatcagggtt  attgtctcat  gagcggtatc  atatttgaat  gtatttagaa  aaataaaca
4801  atagggttcc  cgcgcacatt  tccccgaaaa  gtgccacctg  acgtctaaga  aaccattatt  atcatgacat  taacctataa  aaataggcgt  atcacgagcg
4901  cctttcgtc

```

> RDC3215 Translated Insert Sequence

```

1  magglevalt  dlqssrnnvr  htteetivdh  llvrrgqafn  ltlyfnrnsf  qpglndiifv  vetgplpdla  lgtravfsla  rhhspspwia  wletngatst
101  evslcappta  avgryllkih  idsfqqsvta  yqlgefillf  npwcpedavy  ldsepqrqey  vmndygfliy  gsknwirpcp  wnyggfedki  idiclklldk
201  slhfqtdpat  dcalrgspvy  vsrvvcamin  snddngvln  nwsenytdga  npaewtgsva  ilkqwnatgc  qpvrvgqcvw  faavmctvmr  clgiptrvit
301  nfdsghtdtd  nliideyydn  tgrilgnkkk  dtiwnfhvwn  ecwmarkdlp  payggwqvld  atpqemsgnv  yccgpasvra  ikegevdlny  dtpfvfsmvn
401  adcmwlvvg  gkeqklhqd  ssvgnfistk  siqsderrdi  tenykyeegs  lqerqvflka  lqklkarsfh  gsgrgaelp  srptslsqds  prslhtpslr
501  psdvqvsvsk  fklldppnm  qdicfvllal  nmssqfkdik  vnlsagslh  dgsplspfwg  dtafitlspk  eaktypckis  ysqysqylst  dkllrisalr
601  eeksspekil  vnkiitlsyp  sitinvlgaa  vvnqplsiqv  ifsnplseqv  edcvltvegs  glfkkqkvf  lgvlpqhqa  siiletvpfk  sgqrqianm
701  rsnkfkdkig  yrnvyvdal

```