

Product datasheet for **RG220515**

Transglutaminase 3 (TGM3) (NM_003245) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Transglutaminase 3 (TGM3) (NM_003245) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Transglutaminase 3
Synonyms:	TGE; UHS2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RG220515 representing NM_003245
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTGCTCTAGGAGTCCAGATATCAACTGGCAGAAGGCCTTCAACCGACAAGCGCATCACACAGACA
AGTTCTCCAGCCAGGAGCTCATCTTGGGAGAGGCCAAAACCTCCAGGTCTTAATGATCATGAACAAAGG
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GGTCCCGGTCCGTTTTGATATCTGCCCTCCCGAGTGGCACCAGCAACTGCTCGCCGACTTCTCCTG
CAACAAGTTCCCTGCAATCAAGGCCATGTTGTCCATCGATGTAGCCGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG220515 representing NM_003245
Red=Cloning site Green=Tags(s)

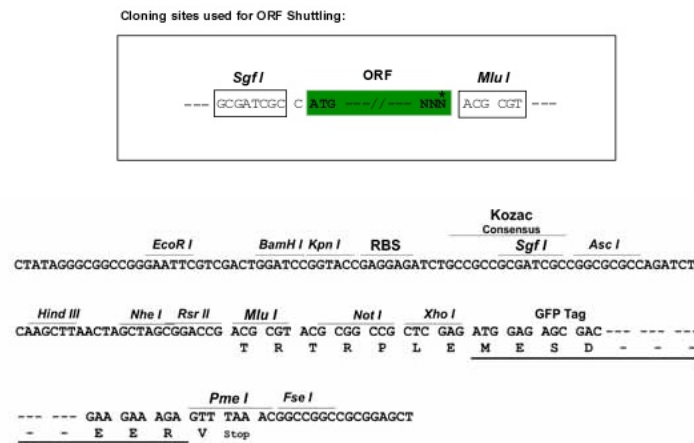
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 QVLDATPQERSQGVFQCGPASVIGVREGDVQLNFMDFIFAEVNADRITWLVDNTTGKQWKNSVNSHTIG
 RYISTKAVGSNARMDVTDKYKYPEGSDQERQVFQKALGKLPNTPFATSSMGLETEEQEPSIIGLKVVA
 GMLAVGKEVNLVLLLNLSRDTKTVTNMTAWTIIYNGTLVHEVWKDSATMSLDPEEEAEHPKISYAQY
 EKYLKSDNMIRITAVCKVPDESEVVVERDIILDNPTLTLEVLNEARVRKPVNVQMLFSNPLDEPVRDCVL
 MVEGSGLLLNGLKIDVPTLGPKERSRVRFDILPSRSGTKQLLADFSCKNFPAIKAMLSIDVAE

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_003245

ORF Size: 2079 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_003245.2](#), [NP_003236.2](#)

RefSeq Size: 2616 bp

RefSeq ORF: 2082 bp

Locus ID: 7053

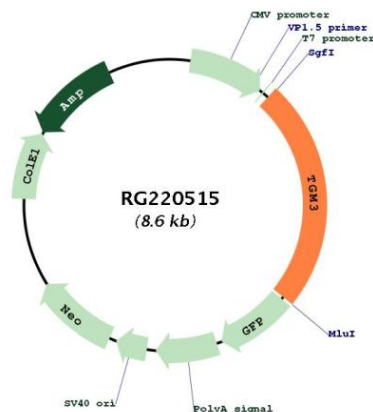
UniProt ID: [Q08188](#)

Cytogenetics: 20p13

Protein Families: Druggable Genome

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 consists of two polypeptide chains activated from a single precursor protein by proteolysis. The encoded protein is involved the later stages of cell envelope formation in the epidermis and hair follicle. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG220515