

## Product datasheet for **RG211080**

### COMP (NM\_000095) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	COMP (NM_000095) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	COMP
Synonyms:	CTS2; EDM1; EPD1; MED; PSACH; THBS5; TSP5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG211080 representing NM\_000095  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGTCCCGACACCGCCTGCGTTCCTTCTGCTCACCTGGCTGCCCTCGGCGCTCCGGACAGGGCCAGA  
 GCCCGTTGGGCTCAGACCTGGGCCCGCAGATGCTTCGGGAAGTGCAGAAACCAACGCGGCTGCAGGA  
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 TCTTCTGCTTCTCCAGGAGAACATCATCTGGCCAACCTGCGTTACCGCTGCAATGACACCATCCAGAG  
 GGACTATGAGACCCATCAGCTGCGGCAAGCC

AG**CGGACCC**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

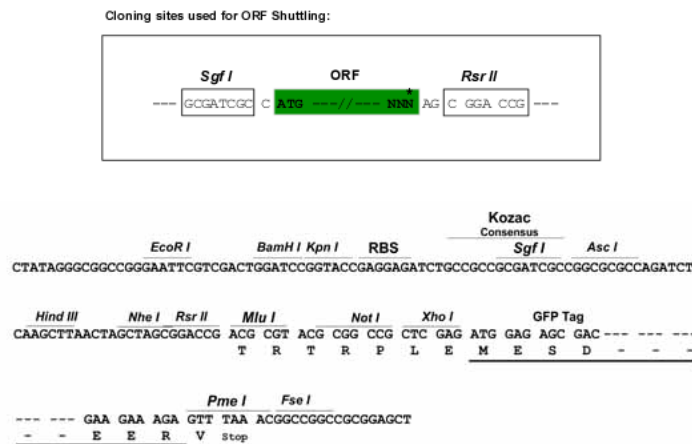
**Protein Sequence:** >RG211080 representing NM\_000095  
Red=Cloning site Green=Tags(s)

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MVPDTACVLLLTLAALGASGQGQSP LGS D L G P Q M L R E L Q E T N A A L Q D V R E L L R Q Q V R E I T F L K N T V M E C D
A C G M Q Q S V R T G L P S V R P L L H C A P G F C F P G V A C I Q T E S G A R C G P C A G F T G N G S H C T D V N E C N A H P C F P R V
R C I N T S P G F R C E A C P P G Y S G P T H Q G V L A F A K A N K Q V C T D I N E C E T G Q H N C V P N S V C I N T R G S F Q C G P C Q
P G F V G D Q A S G C Q R R A Q R F C P D G S P S E C H E H A D C V L E R D G S R S C V C A V G W A G N G I L C G R D T D L D G F P D E K L
R C P E R Q C R K D N C V T V P N S G Q E D V D R D G I G D A C D P D A D G D G V P N E K D N C P L V R N P D Q R N T D E D K W G D A C D N
C R S Q K N D D Q K D T D Q D G R G D A C D D D I D G D R I R N Q A D N C P R V P N S D Q K D S D G D G I G D A C D N C P Q K S N P D Q A D
V D H D F V G D A C D S D Q D Q D G D H Q D S R D N C P T V P N S A Q E D S D H D G Q D A C D D D D N D G V P D S R D N C R L V P N P
G Q E D A D R D G V G D V C Q D D F D A D K V V D K I D V C P E N A E V T L T D F R A F Q T V V L D P E G D A Q I D P N W V V L N Q G R E I
V Q T M N S D P L A V G Y T A F N G V D F E G T F H V N T V T D D D Y A G F I F G Y Q D S S S F Y V V M W K Q M E Q T Y W Q A N P F R A V
A E P G I Q L K A V K S S T G P G E Q L R N A L W H T G D T E S Q V R L L W K D P R N V G W K D K K S Y R W F L Q H R P Q V G Y I R V R F Y
E G P E L V A D S N V V L D T T M R G G R L G V F C F S Q E N I I W A N L Y R C N D T I P E D Y E T H Q L R Q A
```

SGPTRRRLE - GFP Tag - V

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**



**ACCN:** NM\_000095

**ORF Size:** 2271 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\\_000095.3](#)

**RefSeq Size:** 2471 bp

**RefSeq ORF:** 2274 bp

**Locus ID:** 1311

**UniProt ID:** [P49747](#)

**Cytogenetics:** 19p13.11

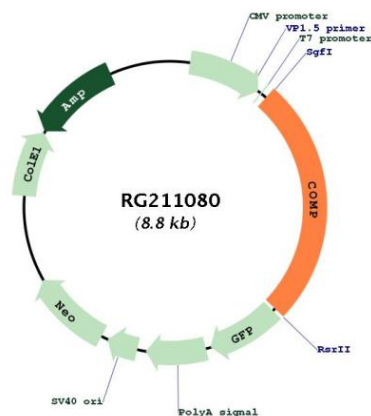
**Domains:** EGF\_CA, tsp\_3, EGF, EGF

**Protein Families:** Druggable Genome, Secreted Protein

**Protein Pathways:** ECM-receptor interaction, Focal adhesion, TGF-beta signaling pathway

**Gene Summary:** The protein encoded by this gene is a noncollagenous extracellular matrix (ECM) protein. It consists of five identical glycoprotein subunits, each with EGF-like and calcium-binding (thrombospondin-like) domains. Oligomerization results from formation of a five-stranded coiled coil and disulfides. Binding to other ECM proteins such as collagen appears to depend on divalent cations. Contraction or expansion of a 5 aa aspartate repeat and other mutations can cause pseudoachondroplasia (PSACH) and multiple epiphyseal dysplasia (MED). [provided by RefSeq, Jul 2016]

### Product images:



Circular map for RG211080