

Product datasheet for **RG221533**

OTOL1 (NM_001080440) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | OTOL1 (NM_001080440) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | OTOL1 |
| Synonyms: | C1QTNF15; C1QTNF16 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



[View online »](#)

ORF Nucleotide Sequence:

>RG221533 representing NM_001080440
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTGGATGTTTTCTTGGCTTTGTGCTATTTTAATTTTTGGCTATTGCTGGTATGAACACAATAGCAA
 AGACCACACCACATACCAAATTTACGAAGAAATCTGAGGAAAGAGAGATGCCAAAGGGTCTAAAGCCATC
 CAGTGGCCACCTCCAGAAGAAGAAACCCTCTTACAGAAATGGCTGAAATGGCAGAACCAATTACC
 AAACCCTCGCCTTGGATTCTGTCTTTGGCACTGCCACTCTCTCCCTTTGAAAACCTCACTCTTGACC
 CAGCTGATTTCTTTGAATTGTGTGATTGTTGTTACCTGTACCCGGGCAGAAAGGAGAACCTGGAGA
 GACTGGACAGCCAGTCTAAAGGAGAGGCTGAAATTTGGGGATCCAGGGCCACCAGGAGTTGTTGGG
 CCCAAGGCCCTAGAGGCTACAAAGGAGAGAAAGGACTCAAAGGAGAACGTGGGGACCAAGGAGTCCAG
 GATACCCAGGAAAACCGGAGCACAAGGTGAACCTGGCCCTAAGGGAGATAAAGGAAACATTGGTTTGGG
 AGGAGTAAAGGACAAAAAGGCTCAAGGGAGACACATGTGGGAATTGTACCAAAGGAGAAAAAGGAGAC
 CAAGGGGCTATGGGCTACCTGGCTGCACGGAGGGCCTGGCGCCAAGGGAGAGAAAGGGGAGATGGGGG
 AGAAGGGGGAGATGGGGGATAAGGGCTGCTGTGGAGATTCTGGGAGAGGGGAGGAAAAGGACAGAAAGG
 TGAGGGGGGTATGAAAGGGGAAAAGGTAGCAAAGGAGACAGTGGAAATGGAAGGCAAAAGCGGCCGTAAT
 GGTCTGCCTGGGGCCAAAGGTGATCCAGGGATTAAGGAGAAAAAGGAGAGTTAGGTCCTCTGGTCTCC
 TGGGACCTACTGGGCCGAAGGGTGACATTGGCAACAAAGGGTCCGAGGCCCACTGGGAAGAAGGGCTC
 TCGGGGCTTTAAGGCTCCAAGGGTGAGTTGGCTAGAGTGCCCGGTGGCTTTTCAAGCGCTGTTTGTCA
 AAGCCATTTCTCTCTAACATCCCCATCAAATTTGAAAAGATTCTCTATAATGACCAAGGGAATTACA
 GTCTGTCACTGGGAAGTTAACTGCTCTATTCTGGGACATATGTTTTTTCTACCATAATTACGGTGGAG
 GGGCGACCTGCTCGAATCAGTCTGGTGGCCAGAATAAGAAGCAGTTCAAGTCCAGAGAAACTCTCTAT
 GGTGAGGAAATAGACCAGGCCTCTCCTCGTCATCTTGAATTAAGTGCAGGAGACCAAGTCTGGCTTG
 AGGTGTCAAAGATTGGAATGGGGTGTATGTCAGTGTGAGGATGACAGCATTTTTACTGGTTCCTTTT
 GTACCCAGAGGAAACTTCTGGAATTTACCA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG221533 representing NM_001080440
 Red=Cloning site Green=Tags(s)

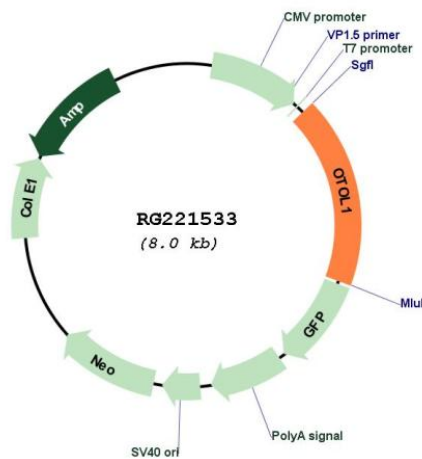
MWMFSLCAILIILAIAGMNTIAKTPHTKFTKKSEEREMPKGLKPSGPPPEEEETLFTEMAEMAEPIT
 KPSALDSVFGTATLSPFENFTLDPADFFLNCCDCSPVPGQKGEPEGETGQPGPKGEAGNLGIPGPPGVVG
 PQGPRGYKGEKGLKGERDQGVPGYKPGAQGEPPGKGDKNIGLGGVKGQKGSKGDTGCTGKGEKGD
 QGAMGSPGLHGGPGAKGEKGEKGEKGEKGEKGEKGEKGEKGEKGEKGEKGEKGEKGEKGEKGEKGEK
 GLPGAAGDPGKGEKGEKGEKGEKGEKGEKGEKGEKGEKGEKGEKGEKGEKGEKGEKGEKGEKGEK
 KPFPPNIPKFEKILYNDQGNYSVPTGKFNCSIPGTYVFSYHITVRRPARISLVAQNKKQFKSRETLY
 GQEIDQASLLVILKLSAGDQVWLEVSKDWNVYVSAEDDSIFTGFLLYPEETSGISP

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_001080440

ORF Size: 1431 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_001080440.1](#), [NP_001073909.1](#)

RefSeq Size: 1434 bp

RefSeq ORF: 1434 bp

Locus ID: 131149

UniProt ID: [A6NHN0](#)

Cytogenetics: 3q26.1

Protein Families: Transmembrane

Gene Summary: This gene encodes a secreted glycoprotein with a C-terminal complement Cq1-like globular domain that belongs to the C1q/tumor necrosis factor-related protein (CTRP) family. The encoded protein is expressed in the inner ear and forms a multimeric complex called the otoconia, together with cerebellin-1 and otoconin-90, as part of the otoconial membrane. It contains extensive posttranslational modifications including hydroxylated prolines and glycosylated lysines. Naturally occurring mutations in this gene are associated with abnormal otoconia formation and balance deficits resulting from vestibular dysfunction. [provided by RefSeq, Jul 2017]