

## Product datasheet for **RG211069**

### **FUT3 (NM\_000149) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** FUT3 (NM\_000149) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** FUT3  
**Synonyms:** CD174; FT3B; FucT-III; LE; Les  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG211069 representing NM\_000149  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGATCCCTGGGTGCAGCCAAGCCACAATGGCCATGGCGCGCTGTCTGGCCGCACTGCTATTTTCAGC  
TGCTGGTGGCTGTGTGTTTCTTCTCCTACCTGCGTGTGTCCCGAGACGATGCCACTGGATCCCTAGGGC  
TCCCAGTGGTCTCTCCGACAGGACACCACTCCACCCGCCCCACCTCCTGATCCTGCTATGGACATGG  
CCTTTCCACATCCCTGTGGCTCTGTCCCGTGTTCAGAGATGGTCCCGGCACAGCCGACTGCCACATCA  
CTGCCGACGCAAGGTGTACCCACAGGCAGACACGGTCATCGTGCACCACTGGGATATCATGTCCAACCC  
TAAGTCACGCCTCCACCTTCCCGAGGCCGAGGGCAGCGCTGGATCTGGTTCACCTGGAGCCACCC  
CCTAACTGCCAGCACCTGGAAGCCCTGGACAGATACTTCAATCTCACCATGTCCTACCGCAGCGACTCCG  
ACATCTTACGCCCTACGGCTGGCTGGAGCCGTGGTCCGGCCAGCCTGCCACCCACCGCTCAACCTCTC  
GGCCAAGACCGAGCTGGTGGCCTGGGCGGTGTCCAAGTGGAGCCGACTCAGCCAGGGTGCCTACTAC  
CAGAGCCTGCAGGCTCATCTCAAGGTGGACGTGTACGGACGCTCCACAAGCCCCGCCAAGGGGACCA  
TGATGGAGACGCTGTCCCGGTACAAGTCTACCTGGCCTTCGAGAAGCTCCTTGCACCCCGACTACATCAC  
CGAGAAGCTGTGGAGAACGCCCTGGAGCCCTGGGCCGTGCCCGTGGTGTGGCCCCAGCAGAAGCAAC  
TACGAGAGTTCTGCCACCCGACGCTTCCATCCAGTGGACGACTCCAGAGCCCAAGGACCTGGCCC  
GGTACCTGCAGGAGCTGGACAAGGACCAGCCCGCTACCTGAGCTACTTTCGCTGGCGGGAGACGCTGCG  
GCCTCGCTCCTTACGCTGGGCACTGGATTTCTGCAAGGCCTGCTGGAACTGCAGCAGGAATCCAGGTAC  
CAGACGGTGCAGCATAGCGGCTTGGTTCACC

**ACGGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA



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**Protein Sequence:** >RG211069 representing NM\_000149  
 Red=Cloning site Green=Tags(s)

MDPLGAAKPQWPWRRCLAALLFQLLVAVCFSSYLRSRDDATGSPRAPSGSSRQDTPTRPTLLILLWTW  
 PFHIPVALSRCSEMPGTADCHITADRKVYPQADTVIVHHWDIMSNPKSRLPPSPRPQGQRWIWFNLEPP  
 PNCQHLEALDRYFNL TMSYRSDSDIFTPYGWLEPWSGQPAHPPLNL SAKTELVAWAVSNWKPD SARVRY  
 QSLQAHLKVDVYGRSHKPLPKGTMETLSRYKFYLAFENSLHPDYITEKLWRNALEAWAVPVVLG P SRSN  
 YERFLPPDAFIHVDDFQSPKDLARYLQELDKDHARYLSYFRWRETLRPRFSWALDFCKACWKLQESRY  
 QTVRSIAAWFT

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_000149

**ORF Size:** 1083 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\\_000149.4](#)

**RefSeq Size:** 2583 bp

**RefSeq ORF:** 1086 bp

**Locus ID:** 2525

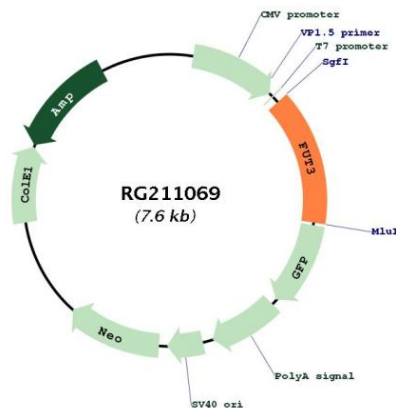
**UniProt ID:** [P21217](#)

**Cytogenetics:** 19p13.3

**Protein Pathways:** Glycosphingolipid biosynthesis - lacto and neolacto series, Metabolic pathways

**Gene Summary:** The Lewis histo-blood group system comprises a set of fucosylated glycosphingolipids that are synthesized by exocrine epithelial cells and circulate in body fluids. The glycosphingolipids function in embryogenesis, tissue differentiation, tumor metastasis, inflammation, and bacterial adhesion. They are secondarily absorbed to red blood cells giving rise to their Lewis phenotype. This gene is a member of the fucosyltransferase family, which catalyzes the addition of fucose to precursor polysaccharides in the last step of Lewis antigen biosynthesis. It encodes an enzyme with alpha(1,3)-fucosyltransferase and alpha(1,4)-fucosyltransferase activities. Mutations in this gene are responsible for the majority of Lewis antigen-negative phenotypes. Differences in the expression of this gene are associated with host susceptibility to viral infection. [provided by RefSeq, Aug 2020]

## Product images:



Circular map for RG211069