

## Product datasheet for **RG204976**

### Prealbumin (TTR) (NM\_000371) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Prealbumin (TTR) (NM\_000371) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Prealbumin  
**Synonyms:** ATTR; CTS; CTS1; HEL111; HsT2651; PALB; TBPA; TTN  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG204976 representing NM\_000371  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCTTCTCATCGTCTGCTCCTCCTGCCTTGGTGGACTGGTATTTGTGTCTGAGGCTGGCCCTACGG  
 GCACCGGTGAATCCAAGTGTCTCTGATGGTCAAAGTTCTAGATGCTGTCCGAGGCAGTCTGCCATCAA  
 TGTGGCCGTGCATGTGTTAGAAAGGCTGCTGATGACACCTGGGAGCCATTTGCCTCTGGAAAACCAAGT  
 GAGTCTGGAGAGCTGCATGGGCTCACAACCTGAGGAGGAATTTGTAGAAGGGATATACAAAGTGAAATAG  
 ACACCAAATCTTACTGGAAGGCACTTGGCATCTCCCCATTCATGAGCATGCAGAGGTGGTATTCACAGC  
 CAACGACTCCGGCCCCCGCGCTACACCATTGCCGCCCTGCTGAGCCCCTACTCCTATTCACCACGGCT  
 GTCGTCACCAATCCCAAGGAA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG204976 representing NM\_000371  
 Red=Cloning site Green=Tags(s)

MASHRLLLLCLAGLVFVSEAGPTGTGESKPLMVKVLDAVRGSPAINVAVHFRKAADDTWEPFASGKTS  
 ESGELHGLTTEEEFVEGIYKVEIDTKSYWKALGISPFHEHAEVVFTANDSGPRRYIAALLSPYSYSTTA  
 VVTNPKE

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



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**Cloning Scheme:**



**ACCN:** NM\_000371

**ORF Size:** 441 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\\_000371.4](#)

**RefSeq Size:** 615 bp

**RefSeq ORF:** 444 bp

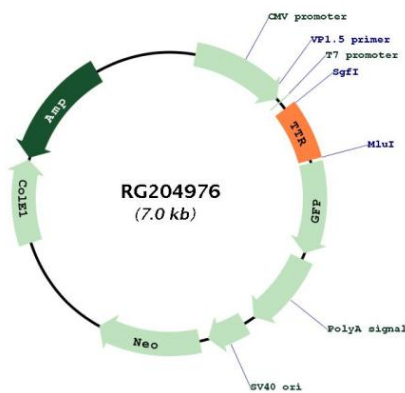
**Locus ID:** 7276

**UniProt ID:** [P02766](#)

**Cytogenetics:** 18q12.1  
**Domains:** TR\_THY  
**Protein Families:** ES Cell Differentiation/IPS, Secreted Protein  
**Gene Summary:**

This gene encodes one of the three prealbumins, which include alpha-1-antitrypsin, transthyretin and orosomucoid. The encoded protein, transthyretin, is a homo-tetrameric carrier protein, which transports thyroid hormones in the plasma and cerebrospinal fluid. It is also involved in the transport of retinol (vitamin A) in the plasma by associating with retinol-binding protein. The protein may also be involved in other intracellular processes including proteolysis, nerve regeneration, autophagy and glucose homeostasis. Mutations in this gene are associated with amyloid deposition, predominantly affecting peripheral nerves or the heart, while a small percentage of the gene mutations are non-amyloidogenic. The mutations are implicated in the etiology of several diseases, including amyloidotic polyneuropathy, euthyroid hyperthyroxinaemia, amyloidotic vitreous opacities, cardiomyopathy, oculoleptomeningeal amyloidosis, meningocerebrovascular amyloidosis and carpal tunnel syndrome. [provided by RefSeq, Aug 2017]

**Product images:**



Circular map for RG204976