

Product datasheet for **RC204976**

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: Myc-DDK
Symbol: Prealbumin
Synonyms: ATTR; CTS; CTS1; HEL111; HsT2651; PALB; TBPA; TTN
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC204976 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGGCTTCTCATCGTCTGCTCCTCTGCCTTGTGGACTGGTATTTGTGTCTGAGGCTGGCCCTACGG
GCACCGGTGAATCCAAGTGTCTCTGATGGTCAAAGTTCTAGATGCTGTCCGAGGCAGTCTGCCATCAA
TGTGGCCGTGCATGTGTTTCAGAAAGGCTGCTGATGACACCTGGGAGCCATTTGCCTCTGGGAAAACCACT
GAGTCTGGAGAGCTGCATGGGCTCACAACCTGAGGAGGAATTTGTAGAAGGGATATACAAAGTGAAATAG
ACACCAAATCTTACTGGAAGGCACTTGGCATCTCCCCATTCATGAGCATGCAGAGGTGGTATTCACAGC
CAACGACTCCGGCCCCCGCGCTACACCATTGCCGCCCTGCTGAGCCCCTACTCCTATTCCACCACGGCT
GTCGTCACCAATCCCAAGGAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC204976 protein sequence
 Red=Cloning site Green=Tags(s)

MASHRLLLLCLAGLVFVSEAGPTGTGESKCPMLVKVLDVIRGSPAINVAVHVRKAADDTWEPFASGKTS
ESGELHGLTTEEEFVEGIYKVEIDTKSYWKALGISPFHEHAEVVFTANDSGPRRYIAALLSPYSYSTTA
VVTNPKE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6069_g04.zip



[View online »](#)

Restriction Sites: SgfI-MluI

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_000371.4](#)

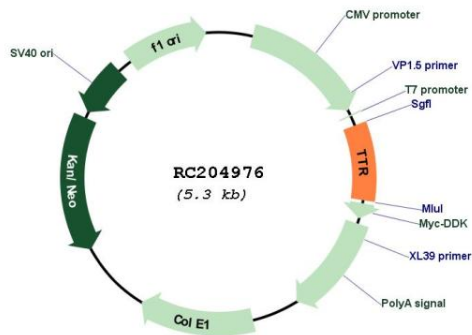
RefSeq Size: 938 bp

RefSeq ORF: 444 bp

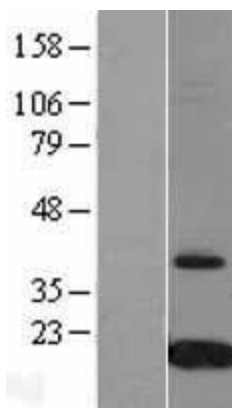
Locus ID: 7276
UniProt ID: [P02766](#)
Cytogenetics: 18q12.1
Domains: TR_THY
Protein Families: ES Cell Differentiation/IPS, Secreted Protein
MW: 15.9 kDa

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]

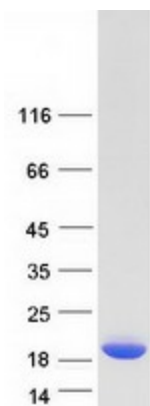
Product images:



Circular map for RC204976



Western blot validation of overexpression lysate (Cat# [LY400134]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204976 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TTR protein (Cat# [TP304976]). The protein was produced from HEK293T cells transfected with TTR cDNA clone (Cat# RC204976) using MegaTran 2.0 (Cat# [TT210002]).