

Product datasheet for RC210021

TYW3 (NM_138467) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TYW3 (NM_138467) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TYW3
Synonyms:	C1orf171
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210021 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGATCGCAGCGCGGAGTTCAGGAAATGGAAGGCGCAATGTTTGAGCAAAGCGGACCTCAGCCGGAAGG
GCAGTGTGACGAGGATGTGGTAGAGCTTGTGCAGTTTCTGAACATGCGAGATCAGTTTTTCACCACCAG
CTCCTGCGCTGGCCGCATCCTACTCCTGACCGGGGTATAAATGGTTTTGAGGTTTCCAGAAACAAACTGT
TGCTGGCTACTGGTTACACACAAACTTTGTGAAAAGATGATGTGATTGTAGCTCTGAAGAAAGCAAATG
GTGATGCCACTTTGAAATTTGAACCATTGTTCTTCATGTGCAGTGTGACAATTGCAGGATGCACAGAT
TCTGCATTCCATGGCAATAGATTCTGGTTTCAGGAACTCTGGCATAACGGTGGGAAAAGAGAGGAAAACT
ATGTTGTTGTCCGGAGTACACATGGCTTAGAAGTTCCATTAAGCCATAAGGGAAAACTGATGGTGACAG
AGGAATATATTGACTTCCTGTTAAATGTGGCAAATCAAAAAATGGAGGAAAAACAAGAAAAGAAATTGAGAG
GTTTTACAACGCTACAGCATGCTTTGGAAAGGGAAACGATGACTAACTTACATCCAAGATCAAAGAG
AAAAATAACTCATATATTATAAGAAAAAAGAAACCCAGAAAAACACGTGCCAGTGTATTACTA
AAGAAAGTATGAAGAAGTTGAAATGATGATGATGATGATCTAGGAATCAATGTTACCATCTTCCCTGA
AGATTAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC210021 protein sequence
 Red=Cloning site Green=Tags(s)

MDRSAEFRKWKQAQCLSKADLSRKGSVDEDDVVELVQFLNMRDQFFTTSSCAGRILLDRGINGFEVQKQNC
 CWLLVTHKLCVKDDVIVALKKANGDATLKFEPFVLHVQCRQLQDAQILHSM/AIDSGRNSGITVVKRGKT
 MLVVRSTHGLEVPLSHKGLMVTEEYIDFLLNVANQKMEENKKRIERFYNCLQHALERETMTNLHPKIKE
 KNNSSYIHKKKRNPEKTRAQCITKESDEELENDDDDDLGINVTIFPEDY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6557_h03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_138467

ORF Size: 777 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_138467.3](#)

RefSeq Size: 3448 bp

RefSeq ORF: 780 bp

Locus ID: 127253

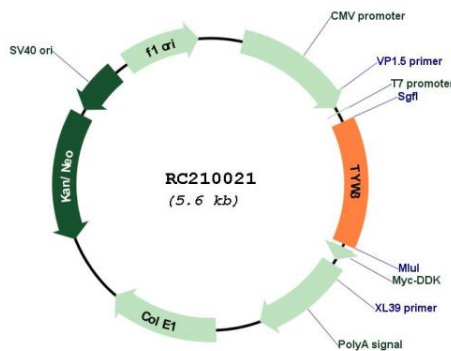
UniProt ID: [Q6IPR3](#)

Cytogenetics: 1p31.1

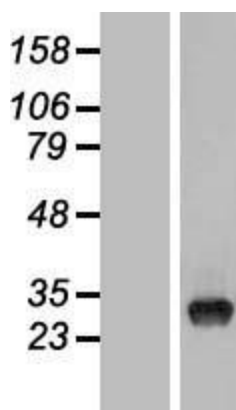
MW: 29.8 kDa

Gene Summary: Wybutosine (yW) is a hypermodified guanosine at the 3-prime position adjacent to the anticodon of phenylalanine tRNA that stabilizes codon-anticodon interactions during decoding on the ribosome. TYW3 is the human homolog of a yeast gene essential for yW synthesis (Noma and Suzuki, 2006).[supplied by OMIM, Mar 2008]

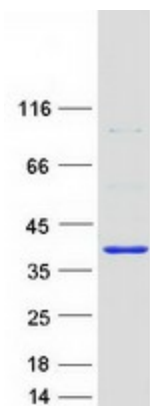
Product images:



Circular map for RC210021



Western blot validation of overexpression lysate (Cat# [LY408593]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210021 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TYW3 protein (Cat# [TP310021]). The protein was produced from HEK293T cells transfected with TYW3 cDNA clone (Cat# RC210021) using MegaTran 2.0 (Cat# [TT210002]).