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Product datasheet for RC203982

TRMT12 (NM_017956) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TRMT12 (NM_017956) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TRMT12
Synonyms:	TRM12; TYW2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC203982 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGAGAGAATGTGGTTGTTAGCAACATGGAGAGAGAAAGTGGGAAGCCCGTGGCTGTTGTCGCAGTTG
TGACTGAGCCTCGGTTTACCCAGCGATACAGAGAATATCTCCAGAGGCAGAAACTCTTTGATACACAGCA
CCGTGTGGAAAAGATGCCGGATGGCTCGGTGGCGCTACCGGTGCTGGGAGAGACGCTTCCAGAGCAGCAC
CTGCAGGAGCTGAGGAATCGTGTTGCCCCAGGCAGTCCCTGTATGCTCACGCAGCTCCCGGATCCTGTTC
CTTCGAAGAGGGCCCAGGGTTGTTCACCTGCCCAAAAATTGTGTCTTGAGGTGAGTCGCTGGGTGGAGGG
TCGGGGAGTCAAGTGGTCAGCCGAGCTGGAGGCTGATTTGCCCCGATCATGGCAACGGCATGGTAATCTC
TTGTTGCTGAGTGAAGACTGTTTCCAAGCCAAGCAGTGGAAAAATCTGGGACCGGAACTCTGGGAGACCG
TTGCCTTGGCACTTGGCGTCCAGCGTTTGGCAAAACGAGGGCGGGTATCACCGGATGGTACTCGAACTCC
AGCAGTGACACTGCTGCTGGGTGACCATGGCTGGGTAGAGCATGTGGATAATGGTATCCGTTATAAGTTT
GACGTGACCCAGTGTATGTTCTCCTTTGGAAACATCACTGAGAAGCTTCGAGTGGCATCGTTGTCCTGTG
CTGGAGAAGTGCTGGTGGATCTCTATGCAGGGATTGGTTATTTTACATTGCCTTTCCTAGTTCATGCTGG
TGCTGCCTTCGTCCATGCTTGTGAGTGGAATCCCCATGCTGTAGTTGCTCTGAGAAATAACCTTGAGATC
AATGGAGTAGCAGATCGGTGCCAAATACACTTTGGAGATAACAGAAAACTGAAGCTCTCAAATATTGCAG
ATAGGGTGATCCTGGGGCTGATTCCCAGCTCTGAAGAAGGCTGGCCCATTGCCTGCCAAGTGTTAAGGCA
GGATGCTGGAGGCATTTTGCATATCCACCAAAATGTGGAATCTTTCCCAGGGAAGAATCTTCAGGCTCTT
GGAGTCAGCAAAGTAGAGAAAGAGCATTGGCTGTATCCTCAGCAAATTACCACCAACCAATGGAAAAATG
GAGCTACCAGGGATTCTAGGGGAAAAATGCTGTCACCAGCCACCAAGCCAGAGTGGCAAAGGTGGGCAGA
ATCTGCAGAAACTCGAATCGCCACTCTTCTTCAGCAGGTGCATGGGAAACCATGGAAGACACAAATTCTG
CACATCCAACCAGTGAAATCCTATGCTCCCCATGTGGATCACATAGTCCTGGATCTGGAATGCTGCCCCT
GTCCTTCAGTTGGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC203982 protein sequence
Red=Cloning site Green=Tags(s)

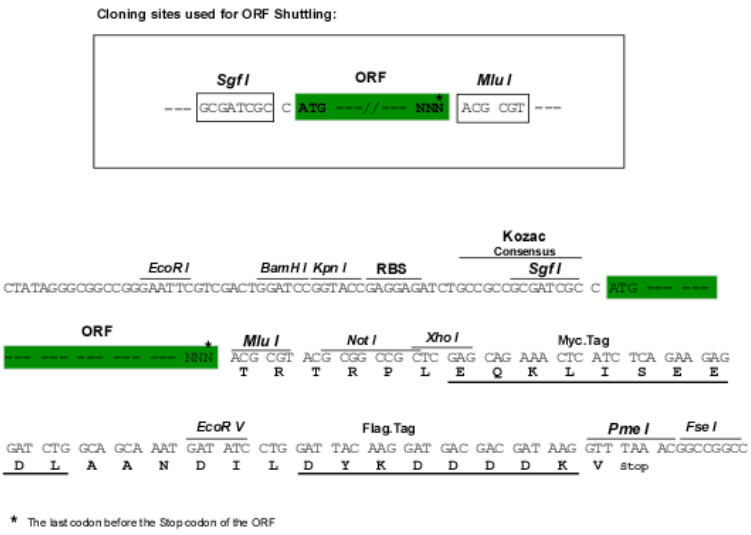
MRENVVVSNMERESGKPVAVVAVVTEPRFTQRYREYLQRQKLFDTQHRVEKMPDGSVALPVLGETLPEQH
LQELRNRVAPGSPCMLTQLPDPVPSKRAQGCSPAQKLCLEVSRWVEGRGVKWSAELEADLPRSWQRHGNL
LLLSEDCFQAKQWKNLGPELWETVALALGVQRLAKRGRVSPDGTRTPAVTLLLGDHGWVEHVDNGIRYKF
DVTQCMFSFGNITEKLRVASLSCAGEVLVDLYAGIGYFTLPFLVHAGAAFVHACEWNPHAVVALRNNLEI
NGVADRCQIHFGDNRKLKLSNIADRVILGLIPSSEEGWPIACQVLRQDAGGILHIHQNVESFPGKNLQAL
GVSKVEKEHWLYPQQITTNQWKNGATRDSRGKMLSPATKPEWQRWAESAETRIATLLQQVHGKPWKTQIL
HIQPVKSYAPHVDHIVLDLECCPCPSVG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6174_f06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_017956

ORF Size: 1344 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_017956.4

RefSeq Size: 2232 bp

RefSeq ORF: 1347 bp

Locus ID: 55039

UniProt ID: Q53H54

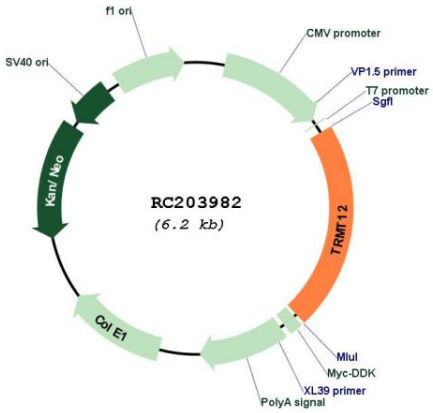
Cytogenetics: 8q24.13

Domains: Met_10

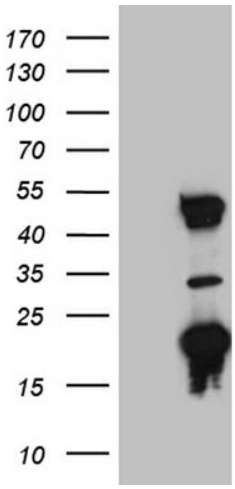
MW: 50.2 kDa

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. TRMT12 is the human homolog of a yeast gene essential for yW synthesis (Noma and Suzuki, 2006).[supplied by OMIM, Mar 2008]

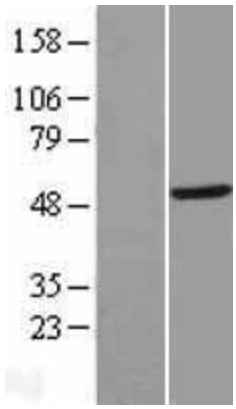
Product images:



Circular map for RC203982



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY TRMT12 (Cat# RC203982, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TRMT12 (Cat# [TA809538])(1:2000). Positive lysates [LY402634] (100ug) and [LC402634] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402634]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203982 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).