

## Product datasheet for **RG206080**

### MTREX (NM\_015360) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MTREX (NM\_015360) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** MTREX  
**Synonyms:** Dob1; fSAP118; KIAA0052; Mtr4; SKIV2L2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG206080 representing NM\_015360  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCGGACGCATTCGGAGATGAGCTGTTGAGCGTGTTCGAGGGCGACTCGACACTGCGGCGGGAACCA  
 AAAAAGACAAGGAAAAGGACAAGGGGAAATGGAAGGGCCCTCAGGGTCTGCAGACAAGGCAGGGAAACG  
 TTTTGATGGTAAATTACAATCAGAATCACTAATAATGGAAAAATAAGAGAGATGTAGATTTTCAAGGT  
 ACAGATGAACCCATTTTGGAAAGAAGCCAGGATAGAAGAGTCAATAACTGAAGACTTAAGTTTGGCAG  
 ACCTGATGCCAGAGTCAAGGTACAATCAGTTGAAACTGTTGAAGGGTGTACACATGAGGTTGCACCTCC  
 TGCAGAAGAGGATTATTTACCACCTAAACCACGAGTTGGAAAAGCTGCTAAGGAATACCCGTTTCATTCTT  
 GATGCTTTTCAAAGAGAGGCCATTCAGTGTGTTGACAATAATCAGTCTGTCTAGTATCTGCACATACCT  
 CAGCGGAAAAACAGTATGCGCCGAGTATGCCATTGCATTGGCCTTAAGGGAAAAGCAGCGTGTAATATT  
 TACCAGCCCAATTAAGGCTCTGAGTAACCAAAAATACCGTGAAATGTATGAAGAAATTTCAAGATGTTGGT  
 TTGATGACTGGTGTACTATTAATCCTACGGCATCTGTCTGTTATGACCAGAGATTTTGAGAA  
 GTATGCTTTACAGAGGTTCCGAAGTTATGAGAGAAGTTGCTTGGGTTATATTTGATGAAATTCATTATAT  
 GAGAGATTCAGAACGTGGTGTAGTATGGGAAGAACTATTATTTGCTTCCTGATAACGTCCACTATGTC  
 TTTCTTTGCGCTACTATTTCAAATGCCCGACGTTTGTGAATGGATTTGCCATTTACATAAACAGCCTT  
 GTCATGTTATTTACACAGATTATCGGCCACTCCATTGCAACACTACATTTTCCAGCAGGGGGAGATGG  
 CCTGCATCTTGTGGTTGATGAAAATGGTGAATTCAGAGAAGATAATTTAATACTGCAATGCAAGTGCTT  
 CGAGATGCAGGTGATTTGGCCAAAGGAGACCAGAAAGGGCGGAAAGGAGGAACAAAAGGACCATCAAATG  
 TTTTCAAATTTGGAAGATGATTATGGAAGAAATTTCCAACCTGTGATTATTTTCAGTTTTAGTAAGAA  
 AGATTGTGAAGCCTATGCACTTCAAATGACCAATTAGATTTCAACACAGATGAAGAAAAGAGATGGTT  
 GAAGAAGTATTCAGTAATGCAATTGATTGCTTATCCGATGAAGATAAAAACTCCCTCAGGTAGAACATG  
 TACTTCTCTTTTGAAGAGGGGAATTGGTATTCACCATGGTGGTTACTTCTATTTTGAAGAAACTAT  
 AGAAATCTCTTTTCTGAAGATTGATAAAGGCCTATTTGCCACGGAGACCTTTGCTATGGGAATTAAC



[View online »](#)

```

ATGCCAGCTAGAACTGTTTTATTTACAAATGCCCGCAAATTTGATGGGAAGGATTTCCGATGGATTCTT
CTGGTGAATACATTACAGATGTCTGGTCGTCTGGAAGGAGAGGAATGGATGATAGAGGAATTGTAATTCT
TATGGTAGATGAAAAGATGAGCCCAACAATTGGAAAACAATTACTTAAGGGCTCCGCTGATCCTCTAAAT
AGTGCTTTCCATTTGACCTACAACATGGTTTTGAACCTACTACGTGTAGAAGAAATTAATCCTGAGTACA
TGTTGGAAAAATCCTTCTACCAGTTTCAGCATTATAGAGCAATCCAGGAGTAGTAGAGAAGGTAAGAA
TTCAGAAGAACAGTATAATAAAATAGTAATCCCAATGAAGAAAGTGTGGTTATCTATTATAAGATTAGA
CAGCAGCTTGCCAAATTTGGGTAAGAAATTTGAAGAATATATTCACAAACCAAAATCTGCTTACCTTTTC
TACAACCAGTCTGTTTGGTAAAGGTAAGAAATGAAGGAGATGACTTTGGCTGGGGAGTAGTGGTGAATTT
CTCAAAAAAGTCAAATGTTAAGCCTAACTCTGGTGAAGTGGATCCTTTGTATGTAGTAGAAGTACTTCTG
CGCTGTAGCAAAGAGAGCTTAAAAAATTCAGCTACAGAAGCTGCAAAACAGCTAAACCTGATGAGAAAAG
GAGAGATGCAGGTTGCCAGTTTTGGTGCATCTCCTGTCTGCTATCAGCAGTGTAGGCTTTACATTCC
TAAAGACCTTCGGCCGGTGGACAATAGACAGAGTGTAAAAATCAATACAGGAAGTTCAGAAACGTTTT
CCTGACGGCATCCCTTATTAGACCCTATTGATGATATGGGCATTCAAGATCAAGGGCTGAAAAAAGTCA
TTCAGAAAAGTAGAAGCTTTGAGCATCGAATGTATTCTCATCCACTTCACAATGATCCAAATTTGAAAAC
TGTGTATACGCTTTGTGAAAAAAAAGCACAGATTGCAATAGATATTAATCTGCAAAAGCGAGAAGTGAAG
AAAGCAAGAACAGTCTCAAAATGGATGAACTCAAATGTCGCAAAACGTGTTTTAAGAAGGTTGGGATTTG
CTACTTCTTCTGATGTAATAGAGATGAAAGGACGAGTGGCTTGTGAGATAAGCAGTGTGATGAGCTCCT
TCTAACTGAGATGATGTTAATGGCCTTTTCAATGACCTTTCTGCAGAACAGGCAACAGCATTATTAAGC
TGCTTTGTGTTTCAAGAGAATTCAGTGTAGATGCCCAAAATTAACAGAACAATTAGCAGGACCACTTCGTC
AAATGCAGGAATGTGCTAAAAGAATTGCAAAAGTTTCAGCAGAAGCCAAATTTGAAAATTTGATGAGAAAAC
TTATCTAAGCTCATTTAAACCTCACTTAATGGATGTAGTATATACCTGGGCAACTGGAGCTACATTTGCC
CATATCTGCAAAATGACAGATGTCTTTGAAGGCAGCATAATTGTTGTATGAGGCGCCTGGAAGAATTGC
TTCGACAAATGTGTCAAGCAGCAAAAGCCATTGGAACACTGAGCTGAAAAATAAATTTGCAAGAAGGAAT
CACCAAAATCAAGAGAGATATTGTGTTTCTGCCAGCCTCTACTTG
    
```

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG206080 representing NM\_015360  
 Red=Cloning site Green=Tags(s)

```

MADAFGDELFSVFEGDSTTAAGTKKDKKDKGKWKPPGSADKAGKRFDGKLGQSESTNNGKNKRDVDFEG
TDEPIFGKKPRIEESITEDLSLADLMRPVKVQSVETVEGCTHEVALPAEEDYLPKPRVKGAAKEYPFIL
DAFQREAIQCVDNQSVLVSHTSAGKTVCAEYAIALALREKQRVIFTSPIKALSNQKYREMYEEFQDVG
LMTGDVFINPTASCLVMTTEILRSMLYRGSEVMREVAWVIFDEIHMYRDSERGVVWEETIILLPDNVHYV
FLSATIPNARQFAEWICHHLKQPCHVIYTDYRPTPLQHYIFPAGGDGLHLVVDENGDFREDNFNTAMQVL
RDAGDLAKGDQKGRKGGTKGPSNVFKIVKIMERNFQPVIIFSFKKDCEAYALQMTKLDNFNTDEEKKMV
EEVFSNAIDCLSDEKLPQVEHVLPLLRKIGIHHGGLLPILKETIEILFSEGLIKALFATETFAMGIN
MPARTVLFNARKFDGKDFRWISSGEYIQMSGRAGRRGMDDRGIVILMVDEKMSPTIGKQLLKGSADPLN
SAFHLYNMVNLNLRVEEINPEYMLEKSFYQFQHYRAIPGVVEKVKNSEEQYNKIVIPNEESVVIYYKIR
QQLAKLKEIEEYIHKPKYCLPFLQPGRLVKVKNEGDDFGWGVVNFVSKKSNVKNPNSGELDPLYYVEVLL
RCSKESLKNSTATEAAKPAKPDKEGEMQVVPVLVHLLSAISSVRLYIPKDLRPVDNRQSVLKSIEVQKRF
PDGIPLLDPIDDMGIQDQGLKVKVIQKVEAFEHRMYSPLHNDPNLETVYTLCEKKAQIAIDIKSAKRELK
KARTVLQMDLCKRKRVLRRLGFATSSDIEMKGRVACEISSADELLLTEMFNGLFNDLSAEQATALLS
CFVVFQENSSEMPKLTEQLAGPLRQMCEAKRIAKVSAEAKLEIDEETYLSSEKPHLMDVVYTWATGATFA
HICKMTDVFEGSIIRCRRLEELLRQMCQAAKAIGNTELENKFAEGITKIKRDIVFAASLYL
    
```

TRTRPLE – GFP Tag – V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_015360

**ORF Size:** 3126 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\\_015360.5](#)

**RefSeq Size:** 4222 bp

**RefSeq ORF:** 3129 bp

Locus ID: 23517

UniProt ID: [P42285](#)

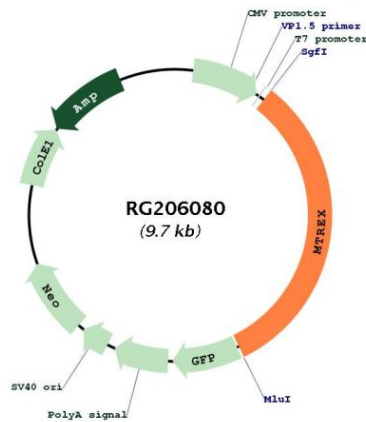
Cytogenetics: 5q11.2

Domains: DEAD, helicase\_C

Protein Pathways: RNA degradation

**Gene Summary:** Component of exosome targeting complexes. Subunit of the trimeric nuclear exosome targeting (NEXT) complex, a complex that directs a subset of non-coding short-lived RNAs for exosomal degradation. Subunit of the trimeric poly(A) tail exosome targeting (PAXT) complex, a complex that directs a subset of long and polyadenylated poly(A) RNAs for exosomal degradation. The RNA exosome is fundamental for the degradation of RNA in eukaryotic nuclei. Substrate targeting is facilitated by its cofactor MTREX, which links to RNA-binding protein adapters (PubMed:27871484). Associated with the RNA exosome complex and involved in the 3'-processing of the 7S pre-rRNA to the mature 5.8S rRNA (PubMed:17412707, PubMed:29107693). May be involved in pre-mRNA splicing.[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for RG206080