

## Product datasheet for **RG230863**

### DDX3 (DDX3X) (NM\_001193416) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DDX3 (DDX3X) (NM_001193416) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DDX3X
Synonyms:	CAP-Rf; DBX; DDX3; DDX14; HLP2; MRX102; MRXSSB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RG230863 representing NM\_001193416  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGAGTCATGTGGCAGTGAAAAATGCGCTCGGGCTGGACCAGCAGTTTGTGTCCTAGACCTGAACCTCTT  
CAGATAATCAGAGTGGAGGAAGTACAGCCAGCAAAGGGCGCTATATTCCTCCTCATTAAAGGAACCGAGA  
AGCTACTAAAGGTTTCTACGATAAAGACAGTTCAGGGTGGAGTTCTAGCAAAGATAAGGATGCGTATAGC  
AGTTTTGGATCTCGTAGTGATTCAAGAGGGAAGTCTAGCTTCTTCAGTGATCGTGGAAAGTGGATCAAGGG  
GAAGGTTTGTGATCGTGGACGGAGTGATTACGATGGCATTGGCAGCCGTGGTACAGAAAGTGGCTTTGG  
CAAATTTGAACGTGGTGGAAACAGTCGCTGGTGTGACAAATCAGATGAAGATGATTGGTCAAACCACTC  
CCACCAAGTGAACGCTTGAACAGGAATCTTTCTGGAGGCAACACTGGGATTAATTTTGGAAAATACG  
ATGACATTCAGTTGAGGCAACAGGCAACAACCTGTCTCCACATATTGAAAGTTTCAGTGATGTTGAGAT  
GGGAGAAAATTATCATGGGAAACATTGAGCTTACTCGTTATACTCGCCAACTCCAGTGCAAAAGCATGCT  
ATTCCTATTATCAAAGAGAAAAGAGACTTGATGGCTTGTGCCAAACAGGGTCTGGAAAACTGCAGCAT  
TTCTGTTGCCATCTTGAGTCAGATTTATTAGATGGTCCAGGCGAGGCTTTGAGGGCCATGAAGAAAA  
TGGAAAGTATGGGCGCCGAAACAATACCAATCTCCTTGGTATTAGCACCAACGAGAGATTGGCAGTA  
CAGATCTACGAGGAAGCCAGAAAATTTTCATACCGATCTAGAGTTCGTCCTTGCCTGTTTATGGTGGT  
CCGATATTGGTCAGCAGATTCGAGACTTGAACGTGGATGCCATTTGTTAGTAGCCACTCCAGGACGCT  
AGTGGATATGATGGAAAGAGGAAAGATTGGATTAGACTTTTCAAATACTGGTGTAGATGAAGCTGAT  
CGGATGTTGGATATGGGTTTGGCCTCAGATTCGTAAGATAGTGAACAAGATACTATGCCTCAAAGG  
GTGTCGCCCACACTATGATGTTTAGTGCTACTTTTCTAAGGAAATACAGATGCTGGCTCGTGATTTCTT  
AGATGAATATATCTTCTGGCTGTAGGAAGAGTTGGCTCTACCTCTGAAAACATCACACAGAAAGTAGTT  
TGGGTGGAAGAATCAGACAAACGGTCATTTCTGCTTGACCTCTAAATGCAACAGGCAAGGATTCAGTGA  
CCTTAGTGTGTTGGAGACCAAAAAGGGTGCAGATTCTCTGGAGGATTTCTTATACCATGAAGGATACGC  
ATGTACCAGCATCCATGGAGACCGTTCTCAGAGGGATAGAGAAGAGGCCCTTCACCAGTTCGCTCAGGA  
AAAAGCCCAATTTTGTGGCTACAGCAGTAGCAGCAAGAGGACTGGACATTTCAAATGTAAACATGTTA  
TCAATTTGACTTGCCAAGTGATATTGAAGAATATGTACATCGTATTGGTCGTACGGGACGTGTAGGAAA  
CCTTGGCCTGGCAACCTCATTCTTAAACGAGAGGAACATAAATATTACTAAGGATTTGTTGGATCTTCTT  
GTTGAAGCTAAACAAGAAGTGCCGCTTGGTTAGAAAACATGGCTTATGAACACCACTACAAGGGTAGCA  
GTCGTGGACGTTCTAAGAGTAGCAGATTTAGTGGAGGGTTTGGTGCCAGAGACTACCGACAAAGTAGCGG  
TGCCAGCAGTTCAGCTTCAAGCAGCAGCCGCGCAAGCAGCAGCCGAGTGGCGGAGGTGGCCACGGTAGC  
AGCAGAGGATTTGGTGGAGGTGGCTATGGAGGCTTTTACAACAGTGATGGATATGGAGGAAATTATAACT  
CCCAGGGGTTGACTGTTGGGGTAAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG230863 representing NM\_001193416  
 Red=Cloning site Green=Tags(s)

```
MSHVAVENALGLDQQFAGLDLNSSDNQSGGSTASKGRYIPPHLRNREATKGFYDKDSSGWSSSKDKDAYS
SFGSRSDSRGKSSFFSDRGSGSRGRFDDRGRSDYDGIGSRGDRSGFGKFERGGNSRWCDKSDDEDDWSKPL
PPSERLEQELFSGGNTGINFEKYDDIPVEATGNNPCPHIESFSDVEMGEIIMGNIELTRYTRPTPVQKHA
IPIIIEKRDLMACAQTGSGKTA AFLLPILSQIYSDGPGGEALRAMKENGRYGRRKQYPI SLVLAPTRELAV
QIYEEARKFSYRSRVRPCVYVGGADIGQQIRDLE RGCHLLVATPGRLVDMMERGKIGLDFCKYLVLDEAD
RMLDMGFEPQIRRIVEQDTMPPKGV RHTMMFSATFPKEIQMLARDFLDEYIFLAVGRVGSTENITQKVV
WVEESDKRSFLDLLLNATGKDSLTLVFVETKKGADSLDFLYHEGYACTSIHGDRSQRDREEALHQFRSG
KSPILVATAVAARGLDISNVKHVINFDLPSDIEEYVHRIGRTGRVGNLGLATSFNERNINITKDLLDLL
VEAKQEVPSWLENMAYEHYKGS SRGRSKSRFSGGF GARDYRQSSGASSSFSSSRASSRSRGGGGHGS
SRFGGGGYGGFYNSDGYGGNYNSQGV DWWGN
```

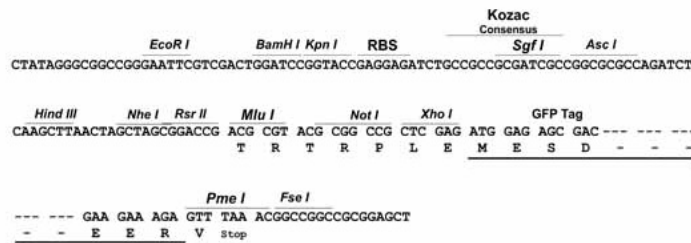
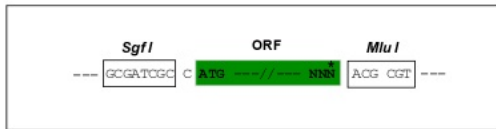
TRTRPLE - GFP Tag - V

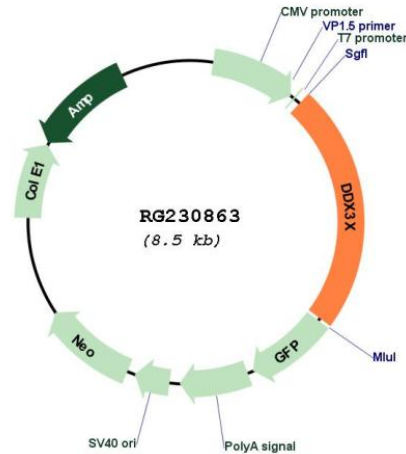
**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**


**ACCN:** NM\_001193416

**ORF Size:** 1983 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\\_001193416.1](#)

RefSeq Size:	5396 bp
RefSeq ORF:	1986 bp
Locus ID:	1654
UniProt ID:	<a href="#">O00571</a>
Cytogenetics:	Xp11.4
Protein Families:	ES Cell Differentiation/IPS
Protein Pathways:	RIG-I-like receptor signaling pathway
Gene Summary:	<p>The protein encoded by this gene is a member of the large DEAD-box protein family, that is defined by the presence of the conserved Asp-Glu-Ala-Asp (DEAD) motif, and has ATP-dependent RNA helicase activity. This protein has been reported to display a high level of RNA-independent ATPase activity, and unlike most DEAD-box helicases, the ATPase activity is thought to be stimulated by both RNA and DNA. This protein has multiple conserved domains and is thought to play roles in both the nucleus and cytoplasm. Nuclear roles include transcriptional regulation, mRNP assembly, pre-mRNA splicing, and mRNA export. In the cytoplasm, this protein is thought to be involved in translation, cellular signaling, and viral replication. Misregulation of this gene has been implicated in tumorigenesis. This gene has a paralog located in the nonrecombining region of the Y chromosome. Pseudogenes sharing similarity to both this gene and the DDX3Y paralog are found on chromosome 4 and the X chromosome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2014]</p>