

Product datasheet for **RG217615**

DDX58 (NM_014314) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DDX58 (NM_014314) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DDX58
Synonyms:	RIG-I; RIG1; RIGI; RLR-1; SGMRT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG217615 representing NM_014314
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACCACCGAGCAGCGACGCGAGCCTGCAAGCCTTCCAGGATTATATCCGGAAGACCCTGGACCCTACCT
 ACATCCTGAGCTACATGGCCCCCTGGTTTAGGGAGGAAGAGGTGCAGTATATTCAGGCTGAGAAAAACAA
 CAAGGGCCCAATGGAGGCTGCCACACTTTTTCTCAAGTTCCTGTTGGAGCTCCAGGAGGAAGGCTGGTTC
 CGTGGCTTTTTGGATGCCCTAGACCATGCAGGTTATTCTGGACTTTATGAAGCCATTGAAAGTTGGGATT
 TCAAAAAAATTGAAAAGTTGGAGGAGTATAGATTACTTTTAAAACGTTTACAACCAGAATTTAAAACCGAG
 AATTATCCCAACCGATATCATTCTGATCTGTCTGAATGTTTAATTAATCAGGAATGTGAAGAAATCTA
 CAGATTTGCTCTACTAAGGGGATGATGGCAGGTGCAGAGAAATGGTGAATGCCTTCTCAGATCAGACA
 AGGAAAACCTGGCCAAAACCTTTGAAACTTGCTTTGGAGAAAAGAAAGGAACAAGTTCAGTGAAGTGGAT
 TGTAGAGAAAGGTATAAAGATGTTGAAACAGAAGATCTTGAGGATAAGATGGAACTTCTGACATACAG
 ATTTTCTACCAAGAAGATCCAGAATGCCAGAATCTTAGTGAGAATTCATGTCCACCTTCAGAAGTGTCTG
 ATACAACTTGTACAGCCATTTAAACCAAGAAATACCAATTAGAGCTTGCTTTGCCTGCATGAAAGG
 AAAAAACACAATAATATGTGCTCCTACAGGTTGTGAAAAACCTTTGTTTCACTGCTTATATGTGAACAT
 CATCTTAAAAAATCCCAAGGACAAAAGGGGAAAGTTGCTTTTTTGGCAATCAGATCCCAGTGTATG
 AACAGCAGAAATCTGATTTCTCAAAATACTTTGAAAGACATGGGTATAGAGTTACAGGCATTTCTGGAGC
 AACAGCTGAGAATGTCCCAGTGGACAGATTGTTGAGAACAATGCATCATCATTTTAACTCCACAGATT
 CTTGTGAACAACCTTAAAAAGGGAACGATTCCATCACTATCCATCTTTACTTTGATGATATTTGATGAAT
 GCCACAACACTAGTAAACAACACCCGTACAATATGATCATGTTTAAATATCTAGATCAGAAAATGGAGG
 ATCTTCAGGCCCACTGCCCCAGGTCATTGGGCTGACTGCCTCGGTTGGTGTGGGGATGCCAAAAACACA
 GATGAAGCCTTGATTATATCTGCAAGCTGTGTGCTTCTCTTGATGCGTCAGTGATGCAACAGTCAAAC
 ACAATCTGGAGGAAGTGGAGCAAGTTGTTTATAAGCCCCAGAAGTTTTTCAGGAAAGTGAATCACGGAT
 TAGCGACAAATTTAAATACATCATAGCTCAGCTGATGAGGGACACAGAGAGTCTGGCAAAGAGAATCTGC
 AAAGACCTCGAAAACCTTCTCAAATTCAAAATAGGGAATTTGGAACACAGAAATATGAACAATGGATTG
 TTACAGTTCAGAAAGCATGCATGGTGTCCAGATGCCAGACAAAGATGAAGAGAGCAGGATTTGTAAGC
 CCTGTTTTTATACACTTACATTTGCGGAAATATAATGATGCCCTCATTATCAGTGAGCATGCACGAATG
 AAAGATGCTCTGGATTACTTGAAGACTTCTTCAGCAATGTCGAGCAGCAGGATTCGATGAGATTGAGC
 AAGATCTTACTCAGAGATTTGAAGAAAAGCTGCAGGAAGTAGAAAAGTGTTCAGGGATCCCAGCAATGA
 GAATCCTAAACTTGAAGACCTCTGCTTCACTTACAAGAAGAGTACCCTTAAACCCAGAGACAATAACA
 ATTCTCTTTGTGAAAACAGAGCACTTGTGGACGCTTTAAAAAATGGATTGAAGGAAATCCTAAACTCA
 GTTTTCTAAAACCTGGCATATTGACTGGACGTGGCAAAACAAATCAGAACACAGGAATGACCCTCCCGGC
 ACAGAAGTGTATATTGGATGCATTCAAAGCCAGTGGAGATCACAATTTCTGATTGCCACCTCAGTTGCT
 GATGAAGGCATTGACATTGCACAGTGAATCTTGTATCCTTTATGAGTATGTGGCAATGTCATCAAAA
 TGATCCAAACAGAGGCAGAGGAAGAGCAAGAGGTAGCAAGTCTTCTTCTGACTAGTAAATGCTGGTGT
 AATTGAAAAAGAACAAATAAACATGTACAAGAAAAAATGATGAATGACTCTATTTTACGCCTTCAGACA
 TGGGACGAAGCAGTATTTAGGGAAAAGATTCTGCACATACAGACTCATGAAAAATTCATCAGAGATAGTC
 AAGAAAAACCAAAACCTGTACCTGATAAGGAAAATAAAAAAGTCTCTGCAGAAAGTGAAGCCTTGGC
 ATGTTACACAGCTGACGTAAGAGTGATAGAGGAATGCCATTACACTGTGCTTGGAGATGCTTTTAAAGGAA
 TGCTTTGTGAGTAGACCACATCCCAAGCCAAAGCAGTTTTCAAGTTTTGAAAAAAGAGCAAGATATTCT
 GTGCCCGACAGAACTGCAGCCATGACTGGGGAATCCATGTGAAGTACAAGACATTTGAGATTCCAGTTAT
 AAAAATTGAAAGTTTTGTGGTGGAGGATATTGCAACTGGAGTTCAGACACTGTACTCGAAGTGAAGGAC
 TTTCAATTTGAGAAGATACCATTTGATCCAGCAGAAATGTCCAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG217615 representing NM_014314
 Red=Cloning site Green=Tags(s)

MTTEQRRSLQAFQDYIRKTLDPTYILSYMAPWFREEEVQYIQAENKNGPMEATLFLKFLELQEEGWF
 RGFILDALDHAGYSLYEAIESWDFKIEKLEERYLLKRLQPEFKTRIIPTDIISDLSECLINQEEIIL
 QICSTKGMAGAEKLEVECLLRSDKENWPKTLKLALEKERNKSELWIVEKGKIDVETEDLEDKMETSDIQ
 IFYQEDPECQNLSENSCPPSEVSDTNLYSPFKPRNYQLELALPAMKGKNTIICAPTGCCKTFVSLICEH
 HLKFKFPQKQKGVVFFANQIPVYEQKSVFSKYFERHGYRVTGISGATAENVPVEQIVENNDIILTPQI
 LVNNLKKGTIPSLSIFTLMIFFDECHNTSKQHPYNNIMFNLYDQKLGSSGGLPQVIGLTASVGVGDAKNT
 DEALDYICKLCASLDASVIATVKHNLLEELEQVVYKPKFFRKVESRISDKFKYIIAQLMRDTESLAKRIC
 KDLENLSIQNREFGTQKYEQWIVTVQKACMVFPMPDKDEESRICKALFLYTSHLRKYNDALIISEHARM
 KDALDYLDKDFSNVRAAGFDEIEQDLTQRFEELQELSVSRDPSNENPKLEDLCFLQEEYHLNPETIT
 ILFVKTRALVDALKNWIEGNPKLSFLKPGILTGRGKTNQNTGMTLPAQKCILDAFKASGDHNLIIATSV
 DEGIDIAQCNLVILYEYVGNVIKMIQTRGRGRARGSKCFLLTSNAGVIEKEQINMYKEKMMNDSILRLQT
 WDEAVFREKILHIQTHEKFIKIRDSQEKPKPVPDKENKLLCRKCKALACYTADVRVIEECHYTVLGDFAKE
 CFVSRPHPKPKQFSSFEKRAKIFCARQNCSDHWGIHVKYKTFEIPVIKIESFVVEDIATGVQTLYSKWKD
 FHFEKIPFDPAEMSK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

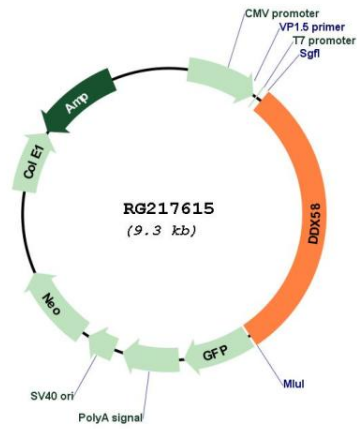
Cloning Scheme:



ACCN: NM_014314

ORF Size:	2775 bp
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	<ol style="list-style-type: none">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_014314.2 , NP_055129.2
RefSeq Size:	4372 bp
RefSeq ORF:	2778 bp
Locus ID:	23586
UniProt ID:	O95786
Cytogenetics:	9p21.1
Domains:	DEAD, helicase_C
Protein Pathways:	Cytosolic DNA-sensing pathway, RIG-I-like receptor signaling pathway
Gene Summary:	DEAD box proteins, characterized by the conserved motif Asp-Glu-Ala-Asp (DEAD), are putative RNA helicases which are implicated in a number of cellular processes involving RNA binding and alteration of RNA secondary structure. This gene encodes a protein containing RNA helicase-DEAD box protein motifs and a caspase recruitment domain (CARD). It is involved in viral double-stranded (ds) RNA recognition and the regulation of the antiviral innate immune response. Mutations in this gene are associated with Singleton-Merten syndrome 2. [provided by RefSeq, Aug 2020]

Product images:



Circular map for RG217615