

Product datasheet for **SC122954**

DHX58 (NM_024119) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DHX58 (NM_024119) Human Untagged Clone
Tag:	Tag Free
Symbol:	DHX58
Synonyms:	D11LGP2; D11lgp2e; LGP2; RLR-3
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene sequence for NM_024119 edited
AAGCAGGGCCGCCTTGGGCAGGCCTACGTGGTGGTGCAGGCGAGACCCAGGCTGGGCAAG
GCGCAGTTTCAGTTTCCATCTTGGGTCTCTGAGCTGAGCAGAGTGGCACCAGGCTGAGTT
AAGTGGGACTGCCTGGGCAGACCTACCTACTAGAGCAGAATGGAGCTTCGGTCTACCA
ATGGGAGGTGATCATGCCTGCCCTGGAGGGCAAGAATATCATCATCTGGCTGCCACGGG
TGCCGGGAAGACCCGGGCGGCTGCTTATGTGGCCAAGCGGCACCTAGAGACTGTGGATGG
AGCCAAGTGGTGTATTGGTCAACAGGGTGCACCTGGTGACCCAGCATGGTGAAGAGTT
CAGGCGCATGCTGGATGGACGCTGGACCGTGACAACCCTGAGTGGGGACATGGGACCACG
TGCTGGCTTTGGCCACCTGGCCCGGTGCCATGACCTGCTCATCTGCACAGCAGAGCTTCT
GCAGATGGCACTGACCAGCCCCGAGGAGGAGGACGCTGGAGCTCACTGTCTTCTCCCT
GATCGTGGTGGATGAGTGCCACCACACGCACAAGGACACCGTCTACAACGTCATCATGAG
CCAGTACCTAGAACTTAAACTCCAGAGGGCACAGCCGCTACCCAGGTGCTGGGTCTCAC
AGCCTCCCAGGCACTGGCGGGCCTCCAACTCGATGGGGCCATCAACCAGTCTGCA
GCTCTGTGCCAATTGGACACGTGGTGCATCATGTACCCAGAACTGCTGCCCCAGCT
GCAGGAGCACAGCCAACAGCCTTGCAAACAGTACAACCTTGCCACAGGGCAGCCAGGA
TCCGTTTGGGGACTTGCTGAAGAAGCTCATGGACCAAATCCATGACCACCTGGAGATGCC
TGAGTTGAGCCGAAATTTGGGACGCAAATGTATGAGCAGCAGGTGGTGAAGCTGAGTGA
GGCTGCGGCTTTGGCTGGGCTTCAGGAGCAACGGGTGTATGCGCTTACCTGAGGCGCTA
CAATGACGCGCTGCTCATCCATGACACCGTCCGCGCCGTGGATGCCTTGGCTGCGCTGCA
GGATTTCTATCACAGGGAGCACGTCCTAAAACCCAGATCCTGTGTGCCGAGCGCCGGCT
GCTGGCCCTGTTTCATGACCGCAAGAATGAGCTGGCCACTTGGCAACTCATGGCCAGA
GAATCCAAAAGTGGAGATGCTGGAAAAGATCCTGCAAAGGCAGTTCAGTAGCTCTAACAG
CCCTCGGGGTATCATCTTACCCGACCCGCAAAAGCGCACACTCCCTCCTGCTGTGGT
CCAGCAGCAGAGGGCCTGCAGACTGTGGACATCCGGGCCAGCTACTGATTGGGGCTGG
GAACAGCAGCCAGAGCACCCACATGACCAGAGGGACCAAGAAAGTATCCAGAAAGTT
CCAAGATGGAACCTGAACCTTCTGGTGGCCACGAGTGTGGCGGAGGAGGGGCTGGACAT
CCCACATTGCAATGTGGTGGTGCCTTATGGGCTTTGACCAATGAAATCTCCATGGTCCA
GGCCAGGGGCGGTGCCCGGGCCGATCAGAGTGTATACGCGTTTGTAGCAACTGAAGGTAG
CCGGGAGCTGAAGCGGGAGCTGATCAACGAGGCGCTGGAGACGCTGATGGAGCAGGCAGT
GGCTGCTGTGCAGAAAATGGACCAGGCCGAGTACCAGGCCAAGATCCGGGATCTGCAGCA
GGCAGCCTTGACCAAGCGGGCGGCCAGGCAGCCAGCGGAGAACAGCGGCAGCAGTT
CCCAGTGGAGCAGTGCAGCTACTCTGCATCAACTGCATGGTGGCTGTGGGCCATGGCAG
CGACCTGCGGAAGGTGGAGGGCACCCACCATGTCAATGTGAACCCCAACTTCTCGAACTA
CTATAATGTCTCCAGGGATCCTGTGGTCAATCAACAAAGTCTTCAAGGACTGGAAGCCTGG
GGGTGTATCAGCTGCAGGAACTGTGGGAGGTCTGGGTCTGCAGATGATCTACAAGTC
AGTGAAGCTGCCAGTGTCAAAGTCCGCAGCATGTCTGCTGGAGACCCCTCAGGGGCGGAT
CCAGGCCAAAAAGTGGTCCCGCTGCCCTTCTCCGTGCCTGACTTTGACTTCTGCAGCA
TTGTGCCGAGAACTTGTCCGACCTCTCCCTGGACTGACCACCTCATTGCTGCAGTGCCCG
GTTTGGGCTGTAGGGGGCGGAGAGTCTGCAGCAGACTCCAGGCCCTCCTTCTGTAATC
ATCAGCTGTGGGCATCAGGCCCACAGCCACACAGGAGTCTGGGCACCCCTGGCTTAGGC
TCCCGCAATGGGAAAACAACCGGAGGGCCAGAGCTTAGTCCAGACCTACCTTGTACGCAC
ATAGACATTTTCATATGCACTGGATGGAGTTAGGGAAACTGAGGCAAAAGAATTTGCCAT
ACTGTACTCAGAAACACGACATTCCTTCCCTACCAAGGCCACTTCTATTTTTTGGAGCTC
CTCATAAAAAATAATGAAAAAATGGGATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAA
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5' Read Nucleotide Sequence:	>OriGene 5' read for NM_024119 unedited GCAGTTTCGATTTGTATACGACTCATATAGGGCGGCCGGAATTCGCACGAGGAAGCGGG CCGCCTTGGGCAGGCCTACGTGGTGGTGCAGGGCANGACCCAGCTGGGCAAGGCGCAGTT TCAGTTTCCATCTTGGGTCTCTGAGCTGAGCAGAGTGGCACCAGGCTGAGTTAAGTGGGA CTGCCCTGGGCAGACCTACCTACTAGAGCAGAATGGAGCTTCGGTCTACCAATGGGAGG TGATCATGCCTGCCCTGGAGGGCAAGAATATCATCATCTGGCTGCCACGGGTGCCGGGA AGACCCGGGCGGTGCTTATGTGGCCAAGCGGCACCTAGAGACTGTGGATGGAGCCAAGG TGGTTGTATTGGTCAACAGGGTGCACCTGGTGACCCAGCATGGTGAAGAGTTCAGGCGCA TGCTGGATGGACGCTGGACCGTGACAACCCTGAGTGGGGACATGGGACCAGTGTGGCT TTGGCCACCTGGCCCGGTGCCATGACCTGCTCATCTGCACAGCAGAGCTTCTGCAGATGG CACTGACCAGCCCCGAGGAGGAGGAGCAGTGGAGCTCACTGTCTTCTCCCTGATCGTGG TGGATGAGTGCCACCACGCACAAGGACACCGTCTACAACGTCATCATGAGCCAGTACC TAGAACTAAACTCCAGAGGGCACAGCCGCTACCCAGGTGCTGGGGTCTCACAGCCTCC CCAGGCACTGGCGGGCCTCAAACCTCGATGGGGGCCATCAACCAGTCTTGGCAGCTCT GTTGCCACCTTGGACACGTGGTGCATCATGTACCCCCAAAACCTGCTGCCCCAGCTGCA GGAGCACAGCCAACAGCCTGGCAACAGTTCAACCCTCTGCCACAGGCCCAACCAGGTTTC TT
Restriction Sites:	Please inquire
ACCN:	NM_024119
Insert Size:	2584 bp
OTI Disclaimer:	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.
	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
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_024119.1 , NP_077024.1
RefSeq Size:	2613 bp

RefSeq ORF:	2037 bp
Locus ID:	79132
UniProt ID:	Q96C10
Cytogenetics:	17q21.2
Protein Pathways:	RIG-I-like receptor signaling pathway
Gene Summary:	<p>Acts as a regulator of DDX58/RIG-I and IFIH1/MDA5 mediated antiviral signaling. Cannot initiate antiviral signaling as it lacks the CARD domain required for activating MAVS/IPS1-dependent signaling events. Can have both negative and positive regulatory functions related to DDX58/RIG-I and IFIH1/MDA5 signaling and this role in regulating signaling may be complex and could probably depend on characteristics of the infecting virus or target cells, or both. Its inhibitory action on DDX58/RIG-I signaling may involve the following mechanisms: competition with DDX58/RIG-I for binding to the viral RNA, binding to DDX58/RIG-I and inhibiting its dimerization and interaction with MAVS/IPS1, competing with IKBKE in its binding to MAVS/IPS1 thereby inhibiting activation of interferon regulatory factor 3 (IRF3). Its positive regulatory role may involve unwinding or stripping nucleoproteins of viral RNA thereby facilitating their recognition by DDX58/RIG-I and IFIH1/MDA5. Involved in the innate immune response to various RNA viruses and some DNA viruses such as poxviruses, and also to the bacterial pathogen <i>Listeria monocytogenes</i>. Can bind both ssRNA and dsRNA, with a higher affinity for dsRNA. Shows a preference to 5'-triphosphorylated RNA, although it can recognize RNA lacking a 5'-triphosphate.[UniProtKB/Swiss-Prot Function]</p>