

Product datasheet for **MC205827**

Dhx58 (NM_030150) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dhx58 (NM_030150) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Dhx58
Synonyms:	B430001I08Rik; D11Lgp2e; Lgp2; LPG2; RLR-3
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

Fully Sequenced ORF: >BC029209
 GCAGGCTCCAGAAATGGAGCTGCGACCCTACCAGTGGGAAGTGATCTTACCTGCTCTGGAGGGCAAGAATA
 TCATTATATGGCTGCCACGGGTGCTGGGAAGACCCGGGCAGCTGCCTTTGTAGCCAAGAGGCATCTAGA
 GACGGTAGACAGAGGCAAGGTGGTGGTACTGGTCAATAGGGTACACCTGGTGAGCCAGCACGCCGAGGAG
 TTCAGGCGCATGCTGGATAAACACTGGACCGTAACAACCTGAGTGGGGACATGGGATCCCGAGCTGGCT
 TTGGCCTGATGGCTCGGAGCCACGACCTGCTCATCTGTACGGCAGAGTTGTTACAGTTGGCACTCAACAG
 CTCTGAGGAGGATGAACACGTAGAGCTCAGAGAATTCTCGCTGATTGTGGTGGACGAGTGCACCACACC
 CACAAGGACACCGTCTACAACACCATCTTGAGCCGGTACCTAGAACAGAAGCTGAAGAAGGCAGAGCCCC
 TCCCCCAGGTCCTGGGTCTCACAGCCTCCCCAGGCACTGGAGGGGCCACCAAGCTCCAAGGGGCCATTGA
 TCACATCTACAGCTTTGTGCGAATTTAGATACGTGCCACATCATGTCGCCAAAGAATTGCTACTCCCAG
 CTGCTGATGCATAACCCGAAGCCCTGCAAGCAGTATGACCTTGCCAAAGGCGCGCACAGGATCCTTTTG
 GGGACTTGATAAAAAAGCTTATGAACCAATCCACCAACAAGTACAGATGCCTGACTTGAAGCAACAATT
 TGGAAACCAGATGTATGAGCAGCAAGTGGTACAGTTGTGCAAGGATGCGGCAGAGGCTGGACTCCAGGAA
 CAGCGGGTGTATGCGCTGCATTTGCGGCGCTACAATGATGCGCTATTTATCCACGATACTGTCCGTGCC
 GGGACGCCCTTGACATGTTGCAAGATTTTACGACAGAGAACGCACCACAAAAACACAGATGGTGCCTGC
 TGAAGAGTGGCTGCTGAAGCTGTTTGTGACCATAAAAATGTGCTGGGCCAGCTAGCAGCTCGGGTCTCT
 GAGAACC CGAAGTTGGAGATGCTGGAAAGGATCTTACTGAAGCAGTTTGGGAGTCTCGGCCACACTCGGG
 GTATCATCTTACCAGAACCCGTCAGACTGCTTCCCTCCTGCTCTGGCTTCGGCAGCAGCCTTGCTT
 ACAGACTGTGGGCATCAAGCCACAGATGCTGATCGGAGCAGGGAACACAAGCCAGAGCACACATGACC
 CAGAAAGACCAGCAGGAAGTGTCCAGGAGTTCAGGGATGGTATCCTGAGCCTTCTAGTGGCCACAAGTG
 TGGCAGAGGAGGGGCTGGATATCGCTCAGTCAATGTGGTGGTGCCTATGGGCTCCTGACCAATGAGAT
 CTCCATGGTCCAGGCCCGGGTCTGCTCGAGCTGGTCAAGTGGTCAAGTGTGTACTCCTTCTGGCTACAGAGGGC
 AGTCGGGAGATGAAGCGGGAGCTAACCAATGAGGCTCTGGAGTGTGATGGAGAAGGCTGTGGCTGCTG
 TACAGAAGATGGACCCTGATGAGTTCAAGGCCAAGATCCGGGACTTGCAGCAAGCATCTCTCGTTAAGCG
 GGACGACGCGCGGCCATCGGGAGATCCAGCAGGGCAGTTCCTACCGAGCACGTGCAACTTCTCTGC
 ATCAACTGTATGGTGGCCGTGGGCTACGGGAGTGACCTGCGGAAAGTGGAGGGCACCCACCAGTCAATG
 TGAACCCCAACTTCTCGGTCTACTATACCACCTCCAGAACCTGTGGTCATTAACAAGGCTTTAAGGA
 CTGGAGACCTGGAGGAACCATCAGGTGCAGTAACTGTGGGGAGGCTGGGGCTTCCAGATGATCTACAAA
 TCAGTGACCTTGGCAGTCTCAAATCGGAAGCATGCTACTGGAAACACCTCGAGGGAAGATCCAGGCCA
 AAAAGTGGTCCCGGTGCCTTTCTCCATACCAGTCTTCGATATCCTGCAGGACTGCACACAAAGCCTGTC
 TGAGCTCTCCCTGGACTGACCCCTTGTGACTGCAGTACCTGGGTCAAAGTGCAGGGGGCAGGAGAGTCC
 AGCAAGCCATCCTCCTTCCCCTGGCTAGCACTCTGGTCAGGGTACCCCTTATTCTGCTGCAGGGATCTT
 AAACACATTGGATGGAGTTGGAAGATGAACGCAGGAGAATTATTATGCCATGATGTTCTAAGAACTACAA
 CATCCCTCCCTTGCCCAAGCACCTGTAGGTTTTGTTTTGTTTTGAGGCTCTTCATAAATTAAGGTG
 TAGTAGAGAATAAAAAAAAAAAAAA

Restriction Sites: RsrII-NotI

ACCN: NM_030150

Insert Size: 2037 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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: [BC029209](#), [AAH29209](#)

RefSeq Size: 2336 bp

RefSeq ORF: 2037 bp

Locus ID: 80861

UniProt ID: [Q99J87](#)

Cytogenetics: 11 63.52 cM

Gene Summary: 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 *Listeria monocytogenes*. 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]