

Product datasheet for MR231708

Jarid2 (NM_001205044) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Jarid2 (NM_001205044) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Jarid2
Synonyms:	Jmj; jumonji
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR231708 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGGATCGCC

ATGAGCAAGGAAAGACCCCAAGAGGAATATCATTGAGAAGAAATACGATGACAGCGATGGGATCCCCTGGT
CAGAAGAGAGAGTTGTACGAAAAGTCCTGTATTTGTCCCTAAAGGAATCAAGAATGCACAGAAAAGGCA
GCATGGGGAAGGCCTTGCCGGGAGCCTGAAGGCGGTAATGGGCTTCTTGGTAATGCCAGGCTAAGGCA
CTAGGACCAGCCTCAGAGCAGTCAGAGAACGAGAAGGATGATGCCTCCCAAGTGCCTCTACTAGCAACG
ATGTTAGTCTTCAGATTTTGAAGAAGGGCCGTCGAGGAAAAGGCCAGGCTGCAAGCACAAAGGAAGTT
TGCTCAATCTCAGCCGAATAGTCCAGCACAACCTCCAGTGAAGATAGTGGAGCCTTTGCTACCCCGCCA
GCTACTCAAATTTCTGACCTCTCTAAAAGGAAGCCTAAGACAGAAGACTTTCTTACCTTTCTCTGCCTTC
GAGGTTCTCCTGCGCTGCCAACAGTATGGTATATTTGGAAGCTCTCAGGATGAGGAGGATGTCGAAGA
GGAAGATGATGAGACGGAAGATGTCAAAGCAACCACCAACAATGCTTCATCTTGTGCCAGTCAACCCCC
AGGAAAGGAAAACCCATAAGCATGTACACAACGGGCAGTTTTCAATGGCTCCAGTAGGTCAGCACGGG
AGAAAGAGCCTGCTCACAACACAGAAGCAAAGAGGCCACTCCGGGAAGGAGAAGCACAGCGAGCCAG
GGCAGACAGCCGGAGAGAACAGGCTTCAGGGGCTCAGCCCAGGCCGCTCGGCTGCGGCTTCTCTGCC
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AGTCAGACCTTACCATCCAAAAGTGTGAAGTACTGCCACAGTGACCAAGGGGACTGTACATACACC
AAAGCCAAGAGAGAACTGGTCAAGGAAACCAACCAACCACCAAAACCAAGTTCAGCTGTCAACCACA
CAATCTCAGGGAAAAGTAAAAGTAGCAATGCAAAAACCCGCAACAGGTGCTATCCCTTGGGGGGCGTC
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TGGACAAGCCGAGTCACCCCAAGAAGTGAAGGGGGTGGCAGGCAATGCTGAAGCCCTGGCAAAA
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TTGAAAAGGAATCGGCCAAAGCGGGCCGCGGCTGGCAAGAATATGCTGGGCAAACAAGCACATGGCAAGA
CAGAGGGCACCCCTGTGAAAATCGTTCTACCTCGCAACCCGAGTCTCGCACAAGCCGCATGACCCACA
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GTCAACCAGATATGTGGCAAAGTGTCTGGCAAACACGGTGGCATCGAGAAGTGTCTCAACAAACCCACAC
CAAAAAGAGGTCCCCGAAGAGAGCGACCGTGGATGTGCCGCATCTCGGCTCCCATCTCA

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR231708 protein sequence
 Red=Cloning site Green=Tags(s)

MSKERPKRNIIQKKYDSDGIPWSEERVVRKVL YL SLKEFKNAQKRQHGEGLAGSLKAVNGLLGNAQAKA
 LGPASEQSENEKDDASQVSSTSNVSSSDFEEGSPSRKRPRLQAQRKFAQSQPNPSTTPVKIVEPLLPPP
 ATQISDL SKRKP TEDFL TFLCLRGSPALPNSMVYFGSSQDEEDVEEDEDV KATTNNASSSCQSTP
 RKGKTHKHVHNGHVFN GSSRSAREKEPAHKHRSKEATPGKEKHSEPRADSRREQASGAQPTAASAAASSA
 KGLAANHQP PPSHRSAQDLRKQVSKVNGVTRMSSLGAGTNSAKKIREVRPSPSKTVKYTATVTKGTVTYT
 KAKREL VKETKPNHHPSSAVNHTISGKTESSNAKTRKQVLSLGGASKSTGPAASGLKASSRLNPKSCTK
 EVGGRQLREGLRNSKRRLEEAQQVDKQPSPKMKGVAGNAEAPGKKASAASGEKSLNNGHVKEVPERS
 LERNRPKRAAAGKNMLGKQAHGKTEGTPCENRSTSQPESHKPHDPQGKPEKSGKSGWAAMDEIPVLRP
 SAKEFDPLIYIESVRAQVEKYGMCRVIPPDPWRPECKLNDEMRFVTQIQHIHKLGRRWGNVQRLACIK
 KHLRSQGITMDELPLIGGCELDLACFFRLINEMGGMQQVTDLKKWNKLADMLRIPKTAQDRLAKLQEAYC
 QYLLSYDSL SPEEHRLEKEVLMEKEILEKRKGPLEGHTESDHHKFHSLPRFEPKNGLVHGVTPRNGFRS
 KLKEVGRAPLKTGRRRLF AQEKEVVKEEEDKGLVNDHFHKCIYGRSVSLTTFYRTARNIMMCF SKEPA
 PAEIEQEWRLVEEKDCHVAVHCGKVDTNTHGSGFPVKGSEPF SRHGWNLT VLPNNTGSILRHLGAVPGV
 TIPWLNIGMVFSTSCWSRDQNHLPYIDYLHTGADCIWYCI PAEEENKLEDVVHTLLQGNSTPGLQMLESN
 VMISPEVLCKKGIKVHRTVQQSQGFVVCFPGSFVSKVCCGYNVSETVHFATTQWTSMGFETAKEMKRRI
 AKPFSMEKLLYQIAQAEAKKENGPTLSTISALLDELDRTELRRRLFEAGLHSSARYGSHDGNSTVADG
 KKKPRKWLQLETERRCQICQHLCYLSMVVQENENVVFCLECALRHVEKQKSCRGLKLMRYRDEEQIISL
 VNQICGKVSQKHGGIENCLNKPTPKRGRPRKRAVDVPPSRLPSS

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



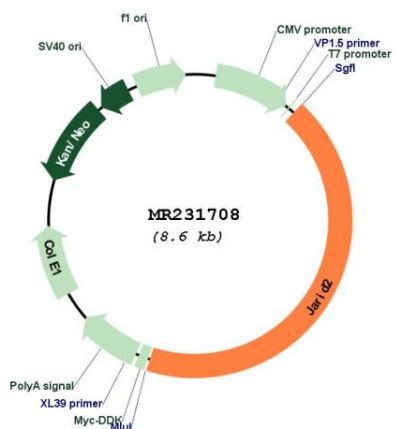
* The last codon before the Stop codon of the ORF

ACCN: NM_001205044

ORF Size: 3702 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:	<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_001205044.1 , NP_001191973.1
RefSeq Size:	5670 bp
RefSeq ORF:	3705 bp
Locus ID:	16468
UniProt ID:	Q62315
Cytogenetics:	13 21.66 cM
MW:	137.4 kDa
Gene Summary:	Regulator of histone methyltransferase complexes that plays an essential role in embryonic development, including heart and liver development, neural tube fusion process and hematopoiesis. Acts by modulating histone methyltransferase activity and promoting the recruitment of histone methyltransferase complexes to their target genes. Binds DNA and mediates the recruitment of the PRC2 complex to target genes in embryonic stem cells. Does not have histone demethylase activity but regulates activity of various histone methyltransferase complexes. In embryonic stem cells, it associates with the PRC2 complex and inhibits trimethylation of 'Lys-27' of histone H3 (H3K27me3) by the PRC2 complex, thereby playing a key role in differentiation of embryonic stem cells and normal development. In cardiac cells, it is required to repress expression of cyclin-D1 (CCND1) by activating methylation of 'Lys-9' of histone H3 (H3K9me) by the GLP1/EHMT1 and G9a/EHMT2 histone methyltransferases. Also acts as a transcriptional repressor of ANF via its interaction with GATA4 and NKX2-5. Participates in the negative regulation of cell proliferation signaling. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR231708