

Product datasheet for **RR211126**

Gad2 (NM_012563) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gad2 (NM_012563) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gad2
Synonyms:	gad65
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RR211126 representing NM_012563
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGGCATCTCCGGGCTCTGGCTTTTGGTCTTCGGATCTGAAGATGGCTCTGGGGATCTGAGAACCCGG
 GAACAGCGAGAGCCTGGTGCCAGGTGGCCAAAAGTTACGGGCGGCATCGGAAACAAGCTATGCGCTCT
 GCTCTACGGAGACTCTGAGAAGCCAGCAGAGAGCGGCGGAGCGTGACCTCGCGGGCCGCCACTCGGAAG
 GTCGCCTGCACCTGTGACCAAAAACCTGCAGCTGCCCAAAGGAGATGTCAATTATGCACTTCTCCACG
 CAACAGACCTGCTGCCAGCCTGTGAAGGAGAAAGGCCACTCTCGCATTCTGCAAGATGTAATGAACAT
 TTTGCTTCAGTACGTGGTGAAGTTTGTAGATCAACTAAAGTGATTGATTTCATTACCCCAATGAG
 CTTCTTCAAGAGTATAATTGGGAATTGGCAGCAACCGCAAAATCTGGAGGAAATTTTGACGCACTGCC
 AAACAACCTCTAAATATGCGATTAAACAGGGCATCCCGATATTTAATCAGCTGTCTACCGGATTGGA
 TATGGTTGGATTAGCAGCAGATTGGTTGACATCAACAGCAAACACGAACATGTTTACCTATGAGATCGCC
 CCTGTATTGTACTACTGGAATATGTGACACTAAAGAAAATGAGGGAAATCATTGGCTGGCCAGGAGGCT
 CTGGCGATGGAATCTTTCTCCTGGTGGTGCCATCTCCAACATGTACGCCATGCTCATTGCCCGCTATAA
 GATGTTTCCAGAAGTCAAGGAAAAGGGGATGGCGGCGTGCCAGGCTCATCGCATTACGTGAGAGCAT
 AGTCACCTTTCTCTCAAGAAGGGAGCTGCAGCCTTGGGGATCGGAACAGACAGCGTGATTCTGATTAAT
 GTGATGAGAGAGGGAAAATGATCCCATCTGACCTTGAAAGAAGATCCTTGAAAGTCAAACAGAAAGGATT
 TGTTCTTTCTGGTGAGTGCCACAGCTGGAACCACTGTGTACGGGGCTTTGATCCTCTCTTGGCTGTA
 GCTGACATCTGCAAAAAATAAGATCTGGATGCATGTGGATGCTGCTTGGGGTGGAGGGTTACTGATGT
 CTCGGAACACAAGTGAAGCTGAACGGTGTGGAGAGGGCCAACCTCTGTGACATGGAATCCCACAAGAT
 GATGGGTGTCCTTGAATGTTCCGCTCTCCTGGTCAGAGAGGAGGACTGATGACAGAGCTGCAACCAG
 ATGCATGCTTCTACCTCTTTCAGCAAGATAAGCACTATGACCTGTCTATGACACGGGAGACAAGGCCCT
 TGCAGTGTGGACGCCACGTGATGTCTTTAAATTATGGCTCATGTGGAGAGCAAAGGGGACTACTGGATT
 TGAAGCTCACATTGATAAGTGTGGAGCTGGCAGAGTATTTATACAATATCATTAAAAACCGAGAAGGA
 TATGAAATGGTGTTCGATGGGAAGCCTCAGCACACAAATGTCTGCTTCTGGTTGTACCTCTAGTTTGC
 GAGTTCTGGAAGACAATGAAGAGAGAATGAGCCGCTCTCAAAGGTGGCGCCAGTGATTAAGCCAGAAT
 GATGGAGTATGGGACCACAATGGTCAGTACCAACCTTAGGAGATAAGGTCAACTTCTCCGCATGGTC
 ATCTCAAACCTGCAGCAACTACCAAGACATTGACTTCTCATTGAAGAAATCGAACGCCTGGGACAAG
 ATTTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR211126 representing NM_012563
 Red=Cloning site Green=Tags(s)

MASPGSGFWSFGSEDGSGDPENPGTARAWCQVAQKFTGGIGNKLCALLYGDSEKPAESGGSVTSRAATRK
 VACTCDQKPCSCPKGDVNYALLHATDLLPACEGERPTLAFLQDVMNILLQYVVKSFDRSTKVDFHYPNE
 LLQEYNWELADQPQNLEEILTHCQTTLKYAIKTGHPRYFNQLSTGLDMVGLAADWLTSTANTNMFTYEIA
 PVFVLLLEYVTLKKMREIIGWPGSGDGI FSPGGAISNMYAMLIARYKMFPEVKEKGMAAVPRLIAFTSEH
 SHFSLKKGAAALGIGTDSVILIKCDERGMIPSDLERRILEVKQKGFVFLVSATAGTTVYGAFDPLLAV
 ADICKKYKIWMHVDAAWGGGLMSRKHKWLNGVERANSVTWNPHKMMGVPLQCSALLVREEGLMQSCNQ
 MHASYLFQQDKHYDLSDYTDGKALQCGRHVDVFKLWLMWRAKGTTFGEAHIDKCLELAELYNI IKNREG
 YEMVFDGKPQHTNVCFWFVPPSLRVLEDNEERMSRLSKVAPVIKARMEYGTMTMSYQPLGDKVNFRRMV
 ISNPAATHQDIDFLIEEIERLGQDL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_012563

ORF Size: 1755 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](#)

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).

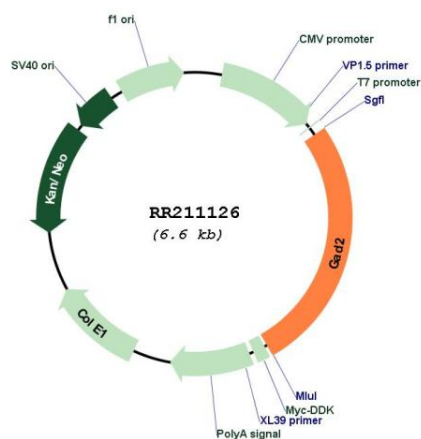
Reconstitution Method:

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_012563.1](#), [NP_036695.1](#)

RefSeq Size:	1966 bp
RefSeq ORF:	1758 bp
Locus ID:	24380
UniProt ID:	Q05683
Cytogenetics:	17q12.3
MW:	65.4 kDa
Gene Summary:	catalyzes synthesis of gamma-Aminobutyric acid (GABA), the most widely distributed inhibitory neurotransmitter [RGD, Feb 2006]

Product images:



Circular map for RR211126