

Product datasheet for **RC217190**

BDNF (NM_170735) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: BDNF (NM_170735) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: BDNF
Synonyms: ANON2; BULN2
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC217190 representing NM_170735
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACCATCCTTTTCCTTACTATGGTTATTTTCATACTTTGGTTGCATGAAGGCTGCCCCATGAAAGAAG
CAAACATCCGAGGACAAGGTGGCTTGGCCTACCCAGGTGTGCGGACCCATGGGACTCTGGAGAGCGTGAA
TGGGCCAAGGCAGGTTCAAGAGGCTTGACATCATTGGCTGACACTTTTGAACACGTGATAGAAGAGCTG
TTGGATGAGGACCAGAAAGTTCGGCCCAATGAAGAAAACAATAAGGACGCAGACTTGTACACGTCCAGGG
TGATGCTCAGTAGTCAAGTGCCTTTGGAGCCTCCTCTTCTCTTTCTGCTGGAGGAATACAAAAATTACCT
AGATGCTGCAAACATGTCCATGAGGGTCCGGCGCCACTCTGACCCTGCCCGCCGAGGGGAGCTGAGCGTG
TGTGACAGTATTAGTGAGTGGGTAAACGGCGGCAGACAAAAGACTGCAGTGGACATGTCGGGCGGGACGG
TCACAGTCCTTGAAGGTCCCTGTATCAAAAGGCCAACTGAAGCAATACTTCTACGAGACCAAGTGCAA
TCCCATGGGTTACACAAAAGAAGGCTGCAGGGGCATAGACAAAAGGCATTGGAACCTCCAGTGCCGAAC
ACCCAGTCGTACGTGCGGGCCCTTACCATGGATAGCAAAAAGAGAATTGGCTGGCGATTCCATAAGGATAG
ACACTTCTGTGTATGTACATTGACCATTAAGGGGAAGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >RC217190 representing NM_170735
 Red=Cloning site Green=Tags(s)

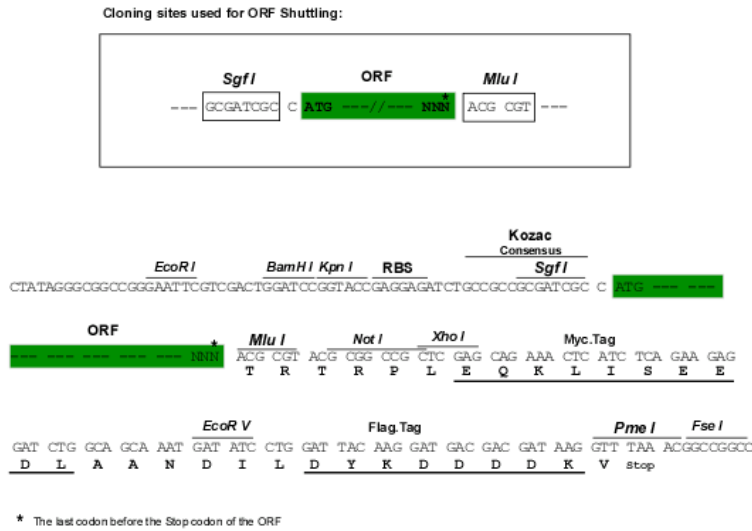
MTILFLTMVISYFGCMKAAPMKEANIRQGGLAYPGVTRHTGLESVNGPKAGSRGLTSLADTFEHVIEEL
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 CDSISEWVTAADKKTAVDMSGGTVTVLEKVPVSKGQLKQFYETKCNPMGYTKEGCRGIDKRHWNSQCRT
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

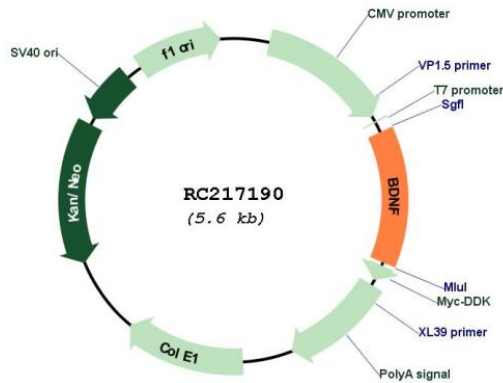
Chromatograms: https://cdn.origene.com/chromatograms/mg2774_c09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

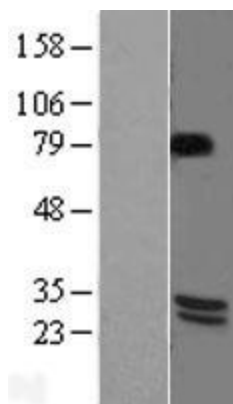


Plasmid Map:



ACCN: NM_170735

ORF Size:	741 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.
RefSeq:	NM_170735.5
RefSeq Size:	4247 bp
RefSeq ORF:	744 bp
Locus ID:	627
UniProt ID:	P23560
Protein Families:	Adult stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Secreted Protein, Transmembrane
Protein Pathways:	Huntington's disease, MAPK signaling pathway, Neurotrophin signaling pathway
MW:	25.7 kDa
Gene Summary:	<p>This gene encodes a member of the nerve growth factor family of proteins. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate the mature protein. Binding of this protein to its cognate receptor promotes neuronal survival in the adult brain. Expression of this gene is reduced in Alzheimer's, Parkinson's, and Huntington's disease patients. This gene may play a role in the regulation of the stress response and in the biology of mood disorders. [provided by RefSeq, Nov 2015]</p>

Product images:

Western blot validation of overexpression lysate (Cat# [LY406855]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217190 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).