

Product datasheet for RC212722

BDNF (NM_170733) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BDNF (NM_170733) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BDNF
Synonyms:	ANON2; BULN2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212722 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGGATCGCC

ATGACCATCCTTTTCCTTACTATGGTTATTTCACTTTGGTTGCATGAAGGCTGCCCCATGAAAGAAG
CAAACATCCGAGGACAAGGTGGCTTGGCTACCCAGGTGTGCGGACCCATGGGACTCTGGAGAGCGTGAA
TGGGCCAAGGCAGGTTCAAGAGGCTTGACATCATTGGCTGACACTTTGAAACACATGATAGAAGAGCTG
TTGGATGAGGACCAGAAAGTTCGGCCCAATGAAGAAAACAATAAGGACGCAGACTTGTACACGTCCAGGG
TGATGCTCAGTAGTCAAGTGCCTTTGGAGCCTCCTCTTCTTTCTGCTGGAGGAATACAAAATTACCT
AGACGCTGCAAACATGTCCATGAGGGTCCGGCGCCACTCTGACCCGCCCCGAGGGGAGCTGAGCGTG
TGTGACAGTATTAGTGAGTGGGTAAACGGCGGCAGACAAAAGACTGCAGTGGACATGTGGGGCGGGACGG
TCACAGTCCTTGAAGAGGTCCCTGTATCAAAGGCCAACTGAAGCAATACTTCTACGAGACCAAGTGCAA
TCCCATGGGTTACACAAAAGAAGGCTGCAGGGGCATAGACAAAAGGCATTGGAATCCCAGTGCCGAACT
ACCCAGTCGTACGTGCGGGCCCTTACCATGGATAGCAAAAAGAGAATTGGCTGGCGATTGATGAGGATAG
ACACTTCTGTGTATGTACATTGACCATTAAGGGGAAGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC212722 protein sequence
Red=Cloning site Green=Tags(s)

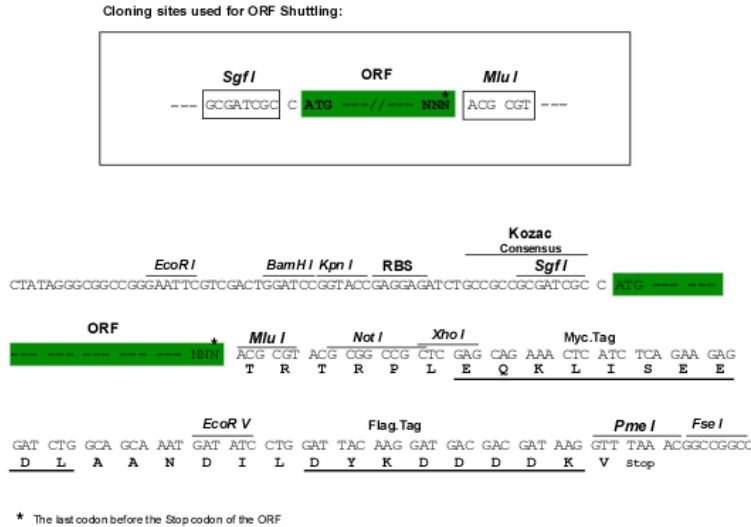
MTILFLTMVISYFGCMKAAPMKEANIRGQGGLAYPGVTRHTGLESVNGPKAGSRGLTSLADTFEHMIEEL
 LDEDQKVRPNENNKDADLYTSRVMLSSQVPLEPPLLFLLEEYKNYLDAANMSMRVRRHSDPARRGELSV
 CDSISEWVTAADKKTAVDMSGGTVTVLEKVPVSKGQLKQFYETKCNPMGYTKEGCRGIDKRHWNSQCRT
 TQSYVRALTMSKKRIGWRFIRIDTSCVCTLTIKRGR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6329_d02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_170733

ORF Size: 741 bp

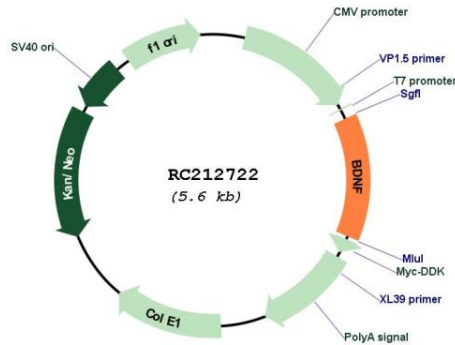
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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](#)

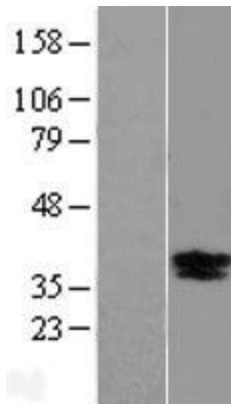
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_170733.3
RefSeq Size:	4028 bp
RefSeq ORF:	744 bp
Locus ID:	627
UniProt ID:	P23560
Cytogenetics:	11p14.1
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:	27.9 kDa
Gene Summary:	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]

Product images:



Circular map for RC212722



Western blot validation of overexpression lysate (Cat# [LY428353]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC227947] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).