

## **Product datasheet for RC226761**

## BDNF (NM 001143809) Human Tagged ORF Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** BDNF (NM\_001143809) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: BDNF

Synonyms: ANON2; BULN2

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >RC226761 representing NM\_001143809
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGCTCTGTGCGATTTCATTGTGTGCTCGCGTTCGCAAGCTCCGTAGTGCAGGAAGGTGCGGGAAGTTCC
ACCAGGTGAGAAGAGTGATGACCATCCTTTTCCTTACTATGGTTATTTCATACTTTGGTTGCATGAAGGC
TGCCCCCATGAAAGAAGCAAACATCCGAGGACAAGGTGGCCTAGCCAGGTGTGCGGACCCATGGG
ACTCTGGAGAGCGTGAATGGGCCCAAGGCAGGTTCAAGAGGCTTGACATCATTGGCTGACACTTTCGAAC
ACGTGATAGAAGAGCTGTTGGATGAGGACCAGAAAGTTCGGCCCAATGAAGAAAACAATAAGGACGCAGA
CTTGTACACGTCCAGGGTGATGCTCAGTAGTCAAGTGCCTTTTGGAGCCTCCTCTTCTCTTTCTGCTGGAG
GAATACAAAAATTACCTAGATGCTGCAAACATGTCCATGAGGGTCCGGCGCCACTCTGACCCTGCCCGCC
GAGGGGAGCTGAGCGTGTGTGACAGTATTAGTGAGTGGGTAACGGCGGCACAAAAAAGACTGCAGTGGA
CATGTCGGGCGGGACGGTCACAGTCCTTGAAAAGGTCCCTGTATCAAAAGGCCAACTGAAGCAATACTTC
TACGAGACCAAGTGCAATCCCATGGGTTACACAAAAGAAGGCTGCAGGGGCATAGACAAAAAGGCATTGGA
ACTCCCAGTGCCGAACTACCCAGTCGTACGTGCGGGCCCTTACCATGGATAGCAAAAAGAAATTGGCTG
GCGATTCATAAGGATAGACACTTCTTTGTGTATGTACATTGACCATTAAAAGGGGAAGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Red=Cloning site Green=Tags(s)

MLCAISLCARVRKLRSAGRCGKFHQVRRVMTILFLTMVISYFGCMKAAPMKEANIRGQGGLAYPGVRTHG TLESVNGPKAGSRGLTSLADTFEHVIEELLDEDQKVRPNEENNKDADLYTSRVMLSSQVPLEPPLLFLLE EYKNYLDAANMSMRVRRHSDPARRGELSVCDSISEWVTAADKKTAVDMSGGTVTVLEKVPVSKGQLKQYF YETKCNPMGYTKEGCRGIDKRHWNSQCRTTQSYVRALTMDSKKRIGWRFIRIDTSCVCTLTIKRGR

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mk8048">https://cdn.origene.com/chromatograms/mk8048</a> g09.zip

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme:



CTATAGGGCGGCCG	EcoR I GGAATTCGTC	Bamh GACTGGAT	II Kpn I	RBS CGAGGAGA	rctgcc		ensus Sgfl	- c c <b>A</b>	TG -		
ORF	NNN	Mlu I ACG CGT T R	ACG CGC		C GAG	CAG A		c.Tag	TCA S	GAA E	GAG E
GAT CTG GCA GC			GAT TAC	Flag.Tag AAG GAT K D	GAC D	GAC G	AT AAG	GTT	me I TAA stop	F. ACGG	se I cagac

<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_001143809

ORF Size: 828 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: 1

- 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: <u>NM 001143809.1</u>, <u>NP 001137281.1</u>

RefSeq ORF: 831 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

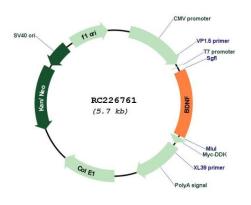
MW: 31.12 kDa

**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

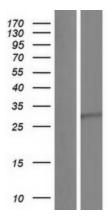
by RefSeq, Nov 2015]

## **Product images:**



Circular map for RC226761





Western blot validation of overexpression lysate (Cat# [LY428355]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC226761 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).