

## Product datasheet for **RG226932**

### **BDNF (NM\_001143810) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	BDNF (NM_001143810) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	BDNF
Synonyms:	ANON2; BULN2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG226932 representing NM_001143810 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTGTGGAGCCACCAGTTTTCTCCATGAGTGCACAAGGTTAATCCTTGTTACTACTCAGAATGCTGAGT  
TTCTACAGAAAGGGTTGCAGGTCCACACATGTTTTGGCGTCTACCCACACGTTCTGTATGGCATGACTG  
TGCATCCCAGAAGAAGGGCTGTGCTGTGTACCTCCAGTTTCAGTGAATTTAACAACTGATCCCTGAA  
AATGGTTTCATAAAGTTCACCAGGTGAGAAGAGTGATGACCATCCTTTTCCTTACTATGGTTATTTTCAT  
ACTTTGGTTGCATGAAGGCTGCCCCATGAAAGAAGCAAACATCCGAGGACAAGGTGGCTTGGCCTACCC  
AGGTGTGCGGACCCATGGGACTCTGGAGAGCGTAATGGGCCAAGGCAGGTTCAAGAGGCTTGACATCA  
TTGGCTGACACTTTCGAACACGTGATAGAAGAGCTGTTGGATGAGGACCAGAAAGTTCGGCCCAATGAAG  
AAAACAATAAGGACGCAGACTTGTACACGTCCAGGGTGTGCTCAGTAGTCAAGTGCCTTTGGAGCCTCC  
TCTTCTCTTTCTGCTGGAGGAATACAAAATTACCTAGATGCTGCAAACATGTCCATGAGGGTCCGGCGC  
CACTCTGACCTGCCCGCCGAGGGGAGCTGAGCGTGTGTGACAGTATTAGTGAGTGGGTAAACGGCGGCAG  
ACAAAAGACTGCAGTGGACATGTGGGCGGGACGGTACAGTCTTGAAAAGGTCCCTGTATCAAAAGG  
CCAAGTGAAGCAATACTTCTACGAGACCAAGTGAATCCCATGGGTTACACAAAAGAAGGCTGCAGGGGC  
ATAGACAAAAGGCATTGGAAGTCCAGTGCCGAAGTACCCAGTACGTGCGGGCCCTTACCATGGATA  
GCAAAAAGAGAATTGGCTGGCGATTTCATAAGGATAGACACTTCTGTGTATGTACATTGACATTAAGG  
GGGAAGA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG226932 representing NM\_001143810  
Red=Cloning site Green=Tags(s)

MCGATSFLHECTRLILVTTQNAEFLQKGLQVHTCFGVYPHASVWHDCASQKKGCAVYLHVSVEFNKLIPE  
 NGFIKFHQVRRVMTILFLTMVISYFGCMKAAPMKEANIRGQGLAYPGVVRTHGTLESVNGPKAGSRGLTS  
 LADTFEHVIEELLDEDQKVRPNEENNKDADLYTSRVMSSQVPLEPPLLFLL EYKNYLDAANMSMRVRR  
 HSDPARRGELSVCDISIEWVTAADKKTAVDMSSGGTVTVLEKVPVSKGQLKQYFYETKCNPMGYTKEGCRG  
 IDKRHWNSQCRTTQSYVRALTMSKKRIGWRFIRIDTSCVCTLTIKRGR

TRTRPLE - GFP Tag - V

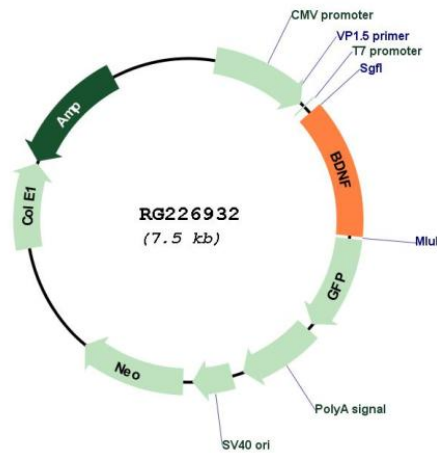
**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



**Plasmid Map:**



**ACCN:** NM\_001143810

**ORF Size:** 987 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001143810.1</a> , <a href="#">NP_001137282.1</a>
<b>RefSeq Size:</b>	4057 bp
<b>RefSeq ORF:</b>	990 bp
<b>Locus ID:</b>	627
<b>UniProt ID:</b>	<a href="#">P23560</a>
<b>Cytogenetics:</b>	11p14.1
<b>Protein Families:</b>	Adult stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Secreted Protein, Transmembrane
<b>Protein Pathways:</b>	Huntington's disease, MAPK signaling pathway, Neurotrophin signaling pathway
<b>Gene Summary:</b>	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]