

Product datasheet for **SC309453**

BDNF (NM_170735) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BDNF (NM_170735) Human Untagged Clone
Tag:	Tag Free
Symbol:	BDNF
Synonyms:	ANON2; BULN2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_170735, the custom clone sequence may differ by one or more nucleotides

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ATGACCATCCTTTTCCTTACTATGGTTATTTACTACTTTGGTTGCATGAAGGCTGCCCCATGAAAAGAG  
CAAACATCCGAGGACAAGGTGGCTTGGCTACCCAGGTGTGCGGACCCATGGGACTCTGGAGAGCGTGAA  
TGGGCCCAAGGCAGGTTCAAGAGGCTTGACATCATTGGCTGACACTTTGAAACACGTGATAGAAGAGCTG  
TTGGATGAGGACCAGAAAGTTCGGCCCAATGAAGAAAACAATAAGGACGCAGACTTGACACGTCCAGGG  
TGATGCTCAGTAGTCAAGTGCCTTTGGAGCCTCCTTCTCTTTCTGCTGGAGGAATACAAAATTACCT  
AGATGCTGCAAACATGTCCATGAGGGTCCGGCCCACTCTGACCCTGCCCGCAGGGGAGCTGAGCGTG  
TGTGACAGTATTAGTGTGGTAAACGGCGGCAGACAAAAGACTGCAGTGGACATGTCGGGCGGGACGG  
TCACAGTCCCTGAAAAGGTCCCTGTATCAAAGGCCAACTGAAGCAATACTTCTACGAGACCAAGTGCAA  
TCCCATGGGTTACACAAAAGAAGGCTGCAGGGGCATAGACAAAAGGCATTGGAATCCCAGTGCCGAACT  
ACCCAGTCGTACGTGCGGGCCCTTACCATGGATAGCAAAAAGAGAATTGGCTGGCGATTTCATAAGGATAG  
ACACTTCTTGTGTATGTACATTGACCATTAAGGGGAAGATAG
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Restriction Sites:	NotI-NotI
ACCN:	NM_170735
Insert Size:	1300 bp



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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:	<p>This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.</p>
Components:	<p>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).</p>
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:	<p>Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.</p>
RefSeq:	<p>NM_170735.4, NP_733931.1</p>
RefSeq Size:	<p>4247 bp</p>
RefSeq ORF:	<p>744 bp</p>
Locus ID:	<p>627</p>
UniProt ID:	<p>P23560</p>
Cytogenetics:	<p>11p14.1</p>
Protein Families:	<p>Adult stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Secreted Protein, Transmembrane</p>
Protein Pathways:	<p>Huntington's disease, MAPK signaling pathway, Neurotrophin signaling pathway</p>

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]

Transcript Variant: This variant (1), also known as IX, represents the longest transcript. Variants 1, 2, 4, 5, and 7-16 encode the same isoform (a).