

Product datasheet for SC321804

BDNF (NM_170732) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: BDNF (NM_170732) Human Untagged Clone

Tag: Tag Free Symbol: BDNF

Synonyms: ANON2; BULN2

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-AC (PS100020)E. coli Selection:Ampicillin (100 ug/mL)

OriGene Technologies, Inc.

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Fully Sequenced ORF:

>OriGene sequence for NM_170732.3 GGCTGCTCTCGCTGCCGCCCCCGGCGAACTAGCATGAAATCTCCCTGCCTCTGCCGA GATCAAATGGAGCTTCTCGCTGATGGGGTGCGAGTATTACCTCCGCCATGCAATTTCCAC TATCAATAATTTAACTTCTTTGCTGCAGAACAGAAGGAGTACATACCGGGCACCAAAGAC TCGCGCCCCCCCCTTTAATTAAGCGAAGGGAACGTGAAAAAATAATAGAGTGTGGG AGTTTTGGGGCCGAAGTCTTTCCCGGAGCAGCTGCCTTGATGGTTACTTTGACAAGTAGT GACTGAAAAGTTCCACCAGGTGAGAAGAGTGATGACCATCCTTTTCCTTACTATGGTTAT TTCATACTTTGGTTGCATGAAGGCTGCCCCCATGAAAGAAGCAAACATCCGAGGACAAGG TGGCTTGGCCTACCCAGGTGTGCGGACCCATGGGACTCTGGAGAGCGTGAATGGGCCCAA GGCAGGTTCAAGAGGCTTGACATCATTGGCTGACACTTTCGAACACATGATAGAAGAGCT GTTGGATGAGGACCAGAAGTTCGGCCCAATGAAGAAAACAATAAGGACGCAGACTTGTA CACGTCCAGGGTGATGCTCAGTAGTCAAGTGCCTTTGGAGCCTCCTCTTCTCTTTCTGCT GGAGGAATACAAAAATTACCTAGACGCTGCAAACATGTCCATGAGGGTCCGGCGCCACTC GGCAGACAAAAAGACTGCAGTGGACATGTCGGGCGGGACGGTCACAGTCCTTGAAAAGGT CCCTGTATCAAAAGGCCAACTGAAGCAATACTTCTACGAGACCAAGTGCAATCCCATGGG TTACACAAAAGAAGGCTGCAGGGGCATAGACAAAAGGCATTGGAACTCCCAGTGCCGAAC CATAAGGATAGACACTTCTTGTGTATGTACATTGACCATTAAAAGGGGAAGATAGTGGAT CAGGGTAAATTATTCAGTTAAGAAAAAAATAATTTTATGAACTGCATGTGTAAATGAAGT TTATACAGTACAGTGGTTCTACAATCTATTTATTGGACATGTCCATGACCAGAAGGGAAA CAGTCATTTGCGCACAACTTAAAAAGTCTGCATTACATTCCTTGATAATGTTGTGGTTTG TCTTGTTAGTACTATATCTGTTTTACTGCTTTTAACTTCTGATAGCGTTGGAATTAAAAC

Restriction Sites: Please inquire ACCN: NM_170732

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 customercom 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 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.

Cytogenetics:

BDNF (NM_170732) Human Untagged Clone - SC321804

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. 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 170732.3</u>, <u>NP 733928.1</u>

11p14.1

 RefSeq Size:
 4084 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

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 (2), also known as IIc, BDNF2C, or 2-5, differs in the 5' UTR and represents use of an alternate promoter compared to variant 1. Variants 1, 2, 4, 5, and 7-16

encode the same isoform (a).