

## **Product datasheet for SC324952**

## OriGene Technologies, Inc.

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## Neuro D4 (DPF1) (NM\_001135156) Human Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

Product Name: Neuro D4 (DPF1) (NM\_001135156) Human Untagged Clone

Tag: Tag Free Symbol: DPF1

Synonyms: BAF45b; NEUD4; neuro-d4

**Vector:** pCMV6 series

Fully Sequenced ORF: >NCBI ORF sequence for NM\_001135156, the custom clone sequence may differ by one or

more nucleotides

ATGGAGAAGACCCACCGCGGGCCGGGTTTGGCCCCGGGACAGATTTACACGTACCCCGCC CGCTGTTGGAGGAAGAACGGAGACTCAACATCCTGGAGGACCCCAGACTCAGGCCCTGC GAGTACAAGATCGACTGTGAAGCACCCCTGAAGAAGGAGGGTGGCCTCCCGGAAGGGCCG GTCCTCGAGGCTCTACTGTGCAGAGACGGGGGGAGAAGAAGATTGAGCTGAAGGAGGAG GAGACCATTATGGACTGTCAGAAACAGCAGTTGCTGGAGTTTCCGCATGACCTCGAGGTG GAAGACTTGGAGGATGACATTCCCAGGAGGAAGAACAGGGCCAAAGGAAAGGCATATGGC ATCGGGGGTCTCCGGAAACGCCAGGACACCGCTTCCCTGGAGGACCGAGACAAGCCGTAT CACACCCACCTGGCCGAGGAGGAGGGGGGGGAGAACGCCGAACGCCACGCCCTGCCCTTC CACCGGAAAAACAACCATAAACAGTTTTACAAAGAATTGGCCTGGGTCCCTGAGGCACAA AGGAAACACACAGCCAAGAAGGCGCCCGACGGCACTGTCATCCCCAACGGCTACTGTGAC TTCTGCCTGGGGGGCTCCAAGAAGACGGGGTGTCCCGAGGACCTCATCTCCTGTGCGGAC TGTGGGCGATCAGGACACCCCTCGTGTTTACAATTCACGGTGAACATGACGGCAGCCGTG CGGACCTACCGCTGGCAGTGCATCGAGTGCAAATCCTGCAGCCTGTGCGGAACCTCCGAG AACGACGACCAGCTGCTGTTTTGTGATGACTGCGATCGGGGTTACCACATGTACTGCCTG AGTCCCCCATGGCGGAGCCCCCGGAAGGGAGCTGGAGCTGTCACCTCTGTCTCCGGCAC

CTGAAGGAAAAGGCTTCTGCTTACATCACCCTCACC

**Restriction Sites:** Please inquire **ACCN:** NM 001135156

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

**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.





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.

NM 001135156.1, NP 001128628.1 RefSeq:

RefSeq Size: 2306 bp RefSeq ORF: 999 bp 8193 Locus ID: **UniProt ID:** Q92782 Cytogenetics: 19q13.2

**Protein Families:** Druggable Genome, Transcription Factors

**Gene Summary:** 

May have an important role in developing neurons by participating in regulation of cell survival, possibly as a neurospecific transcription factor. Belongs to the neuron-specific chromatin remodeling complex (nBAF complex). During neural development a switch from a stem/progenitor to a post-mitotic chromatin remodeling mechanism occurs as neurons exit the cell cycle and become committed to their adult state. The transition from proliferating neural stem/progenitor cells to post-mitotic neurons requires a switch in subunit composition of the npBAF and nBAF complexes. As neural progenitors exit mitosis and differentiate into neurons, npBAF complexes which contain ACTL6A/BAF53A and PHF10/BAF45A, are exchanged for homologous alternative ACTL6B/BAF53B and DPF1/BAF45B or DPF3/BAF45C subunits in neuron-specific complexes (nBAF). The npBAF complex is essential for the selfrenewal/proliferative capacity of the multipotent neural stem cells. The nBAF complex along with CREST plays a role regulating the activity of genes essential for dendrite growth (By similarity).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (3) has multiple coding region differences, including use of a downstream translation initiation codon, compared to variant 4. The encoded protein (isoform c) is shorter than isoform d. Sequence Note: The RefSeq transcript and protein were derived from transcript and genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.