

Product datasheet for RG229181

Neuro D4 (DPF1) (NM 004647) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Neuro D4 (DPF1) (NM_004647) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: DPF1

Synonyms: BAF45b; NEUD4; neuro-d4

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG229181 representing NM_004647

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

CGGGGAGCAAGATGGCCACTGTCATCCCTGGCCCCCTGAGCCTAGGCGAGGACTTCTACCGCGAGGCCAT CGAGCACTGCCGCAGTTACAACGCGCGCCTGTGCGCCGAGCCGAGCCTGCGACTGCCCTTCCTCGACTCG CGGGACAGATTTACACGTACCCCGCCCGCTGTTGGAGGAAGAAACGGAGACTCAACATCCTGGAGGACCC CAGACTCAGGCCCTGCGAGTACAAGATCGACTGTGAAGCACCCCTGAAGAAGGAGGGTGGCCTCCCGGAA GGGCCGGTCCTCGAGGCTCTACTGTGTGCAGAGACGGGGGAGAAGAAGATTGAGCTGAAGGAGGAGGAGAGA CCATTATGGACTGTCAGAAACAGCAGTTGCTGGAGTTTCCGCATGACCTCGAGGTGGAAGACTTGGAGGA TGACATTCCCAGGAGGAAGAACAGGGCCAAAGGAAAGGCATATGGCATCGGGGGTCTCCGGAAACGCCAG GACACCGCTTCCCTGGAGGACCGAGACAAGCCGTATGTCTGTGATAAGTTTTACAAAGAATTGGCCTGGG TCCCTGAGGCACAAAGGAAACACACAGCCAAGAAGGCGCCCGACGGCACTGTCATCCCCAACGGCTACTG TGACTTCTGCCTGGGGGGCTCCAAGAAGACGGGGTGTCCCGAGGACCTCATCTCCTGTGCGGACTGTGGG CGATCAGGACACCCCTCGTGTTTACAATTCACGGTGAACATGACGGCAGCCGTGCGGACCTACCGCTGGC AGTGCATCGAGTGCAAATCCTGCAGCCTGTGCGGAACCTCCGAGAACGACGGTGCCAGCTGGGCGGGTCT CACCCCCAGGACCAGCTGCTGTTTTGTGATGACTGCGATCGGGGTTACCACATGTACTGCCTGAGTCCC CCCATGGCGGAGCCCCCGGAAGGGAGCTGGAGCTGTCACCTCTGTCTCCGGCACCTGAAGGAAAAGGCTT CTGCTTACATCACCCTCACC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence:

>RG229181 representing NM_004647 Red=Cloning site Green=Tags(s)

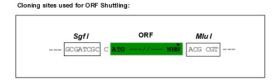
MGGLSARPTAGRTDPAGTCWGQDPGSKMATVIPGPLSLGEDFYREAIEHCRSYNARLCAERSLRLPFLDS QTGVAQNNCYIWMEKTHRGPGLAPGQIYTYPARCWRKKRRLNILEDPRLRPCEYKIDCEAPLKKEGGLPE GPVLEALLCAETGEKKIELKEEETIMDCQKQQLLEFPHDLEVEDLEDDIPRRKNRAKGKAYGIGGLRKRQ DTASLEDRDKPYVCDKFYKELAWVPEAQRKHTAKKAPDGTVIPNGYCDFCLGGSKKTGCPEDLISCADCG RSGHPSCLQFTVNMTAAVRTYRWQCIECKSCSLCGTSENDGASWAGLTPQDQLLFCDDCDRGYHMYCLSP PMAEPPEGSWSCHLCLRHLKEKASAYITLT

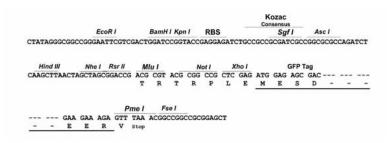
TRTRPLE - GFP Tag - V

Restriction Sites:

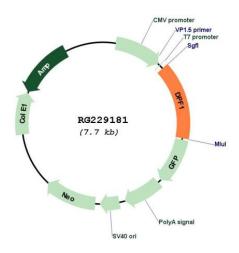
Sgfl-Mlul

Cloning Scheme:





Plasmid Map:



ACCN: NM 004647

ORÏGENE

ORF Size: 1140 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. 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 004647.3, NP 004638.2 RefSeq:

RefSeq Size: 2227 bp RefSeq ORF: 1062 bp Locus ID: 8193 **UniProt ID:** Q92782 19q13.2 **Cytogenetics:**

Domains: **PHD**

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]