

Product datasheet for MC227372

Dpf3 (NM 001267625) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Dpf3 (NM_001267625) Mouse Untagged Clone

Tag: Tag Free Symbol: Dpf3

Synonyms: 2810403B03Rik; 6530402L11Rik; BAF45C; C78788; cer-d4; CERD4

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

Fully Sequenced ORF: >MC227372 representing NM_001267625

TTGGCTGCCAGGCCTAG

Red=Cloning site Blue=ORF Orange=Stop codon

ATGGCGACTGTCATTCACAACCCCCTGAAAGCGCTTGGGGACCAGTTCTACAAGGAAGCCATTGAGCACT GGTGGCTCAGAACAACTGCTACATCTGGATGGAGAAGAGGCACCGCGGCCCAGGCCTCGCTCCGGGCCAG GACTCCTGGAAATCAAACCCGAAGTAGAACTGCCCCTGAAGAAGATGGATTTACCTCTGAGAGTACCAC ACTGGAAGCCTTGCTTCGCGGCGAGGGAGTAGAGAAGAAGGTGGATGCCAGAGAAGAAGAAGCATCCAG GAGATACAGAGGGTTTTGGAAAATGATGAAAACGTAGAAGAAGGGAATGAAGAGGGATTTTGGAAGAAG ATGTTCCCAAGCGCAAGAACAGGACCAGAGGACGGGCTCGCGGCTCTGCAGGCGGAAGGAGGAGGCATGA TGCCGCCTCTCAGGAAGACCACGACAAACCCTACGTCTGCGACATCTGTGGCAAGCGCTACAAGAACCGG AGACCCGATCCCCACCCAACCACAGAAATGAGAACCACAGACCCCAGAAAGGACCAGACGGGACAGTCAT TCCTAATAACTACTGTGACTTCTGCTTGGGGGGGCTCCAACATGAACAAGAAGAGTGGGAGGCCTGAAGAG CTGGTGTCCTGTGCAGACTGTGGACGCTCTGGTCATCCAACTTGCCTGCAGTTCACTCTGAACATGACTG AGGCAGTTAAGACCTACAAGTGGCAGTGCATAGAGTGTAAATCCTGTATCCTGTGTGGGACCTCGGAGAA CGACGACCAGCTACTCTTCTGTGATGACTGCGATCGTGGCTATCACATGTACTGTTTAAATCCCCCAGTG GCTGAGCCCCCAGAAGGAAGCTGGAGCTGCCATTTATGCTGGGAGCTGCTCAAAGAGAAAGCATCAGCCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul



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Insert Size: 1137 bp

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: Clone contains native stop codon, and expresses the complete ORF without any c-terminal

tag.

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 001267625.1</u>, <u>NP 001254554.1</u>

RefSeq Size: 3155 bp
RefSeq ORF: 1137 bp
Locus ID: 70127
UniProt ID: P58269

Cytogenetics: 12 D1



Gene Summary:

Muscle-specific component of the BAF complex, a multiprotein complex involved in transcriptional activation and repression of select genes by chromatin remodeling (alteration of DNA-nucleosome topology). Specifically binds acetylated lysines on histone 3 and 4 (H3K14ac, H3K9ac, H4K5ac, H4K8ac, H4K12ac, H4K16ac). In the complex, it acts as a tissuespecific anchor between histone acetylations and methylations and chromatin remodeling. It thereby probably plays an essential role in heart and skeletal muscle development (By similarity). 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 self-renewal/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.[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).