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Product datasheet for MG204514

Dpf3 (BC048572) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dpf3 (BC048572) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dpf3
Synonyms:	CERD4, cer-d4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG204514 representing BC048572
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGCTGCTTGCCCAAGGGCCACAACAGGCCTGGGGCCTGGATGGAGAAGAGGCACCGCGGCCCAGGCC
TCGCTCCGGGCCAGTTGTACACATACCCTGCCCGCTGCTGGCGCAAGAAGCGACGATTGCACCCACCAGA
GGACCCAAAACTACGACTCCTGGAAATCAAACCCGAAGTAGAACTGCCCCTGAAGAAAGATGGATTTACC
TCTGAGAGTACCACACTGGAAGCCTTGCTTCGCGGCGAGGGAGTAGAGAAGAAGGTGGATGCCAGAGAAG
AGGAAAGCATCCAGGAGATACAGAGGGTTTTGGAAAATGATGAAAACGTAGAAGAAGGGAATGAAGAGGA
GGATTTGGAAGAAGATGTTCCCAAGCGCAAGAACAGGACCAGAGGACGGGCTCGCGGCTCTGCAGGCGGA
AGGAGGAGGCATGATGCCGCCTCTCAGGAAGACCACGACAAACCCTACGTCTGCGACATCTGTGGCAAGC
GCTACAAGAACCGGCCAGGACTCAGCTACCACTACGCTCATACTCACCTGGCCAGCGAGGAGGGAGACGA
AGCCCAAGACCAGGAGACCCGATCCCCACCCAACCACAGAAATGAGAACCACAGACCCCAGAAAGGACCA
GACGGGACAGTCATTCCTAATAACTACTGTGACTTCTGCTTGGGGGGCTCCAACATGAACAAGAAGAGTG
GGAGGCCTGAAGAGCTGGTGTCCTGTGCAGACTGTGGACGCTCTGCTCATTTGGGAGGAGAAGGCAGGAA
GGAGAAGGAGGCAGCGGCCGCAGCACGTACCACGGAGGACTTATTCGGTTCCACGTCAGAAAGTGACACC
TCAACTTTCTACGGCTTTGATGAGGACGATTTGGAAGAGCCTCGCTCCTGTCGAGGACGCCGCAGTGGCC
GGGGTTCACCCACAGCAGATAAAAAGGGCAGCTGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

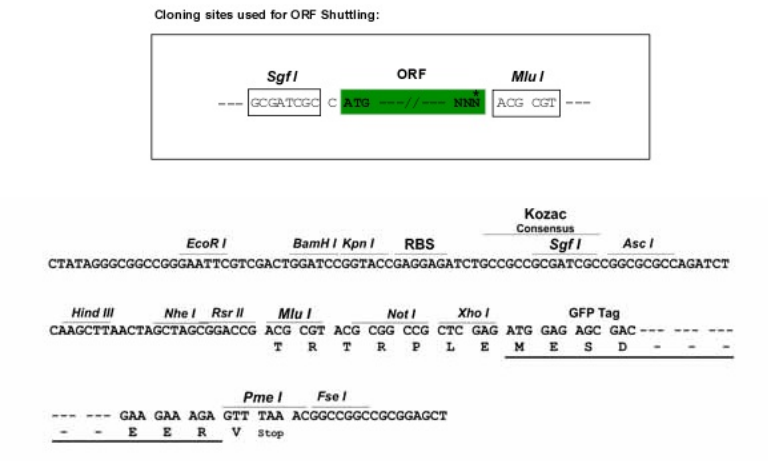
>MG204514 representing BC048572
Red=Cloning site Green=Tags(s)

MGCLPKGHNRPGAWMEKRHRGPGLAPGQLYTYPARCWRKKRRLHPPEDPKLRLLEIKPEVELPLKKDGFT
SESTTLEALLRGEGVEKKVDAREEESIQEIQRVLENDENVEEGNEEEDLEEDVPKRKNRTRGRARGSAGG
RRRHDAASQEDHDKPYVCDICGKRYKNRPGLSYHYAHTHLASEEGDEAQDQETRSPPNHRNENHRPQKGP
DGTVIPNNYCDFCLGGSNMNKKSGRPEELVSCADCGRSAHLGGEGRKEKEAAAAARTTEDLFGSTSESDT
STFYGFDEDDLEEPRSCRGRRSGRGSPTADKKGSC

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: BC048572

ORF Size: 945 bp

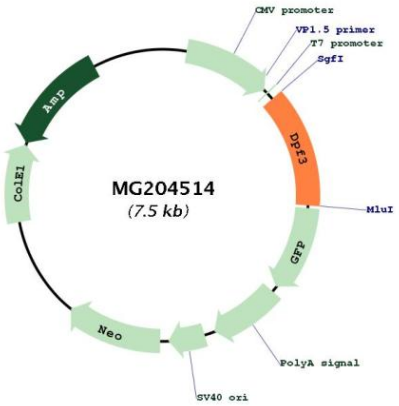
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
RefSeq:	BC048572.1
RefSeq Size:	1123 bp
RefSeq ORF:	947 bp
Locus ID:	70127
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 tissue-specific 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]

Product images:



Circular map for MG204514