

Product datasheet for **MG217834**

Dach1 (NM_001038610) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dach1 (NM_001038610) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dach1
Synonyms:	Dac; Dach
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>MG217834 representing NM_001038610
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCAGTGCCGGCGGCTTTGATCCCTCCGACCCAGCTGGTCCCCCTCAACCCCGATCTCTACTTCTG
 CTTCTCCTCGGGCACCACCACCTCCACCTCCTCGGCGACCTCGTCTCCGGCTCCATCCATCGGACCCCC
 GGCGTCGTCGGGCAACTCTGTTCCGGCCGGAGCCATTGCCTCTTCTGCTTCTTTCAGCCGCGGCC
 ACAGTCACCTCTCCTGGTGGCGGCGGGCGGAGCGGAGGCGGCGGTGGCAGCGGCGGCAACGGAGGCG
 GCGGGGGAGCAACTGCAACCCAGCCTGGCGGCGGGAGCAGCGGCGGCGGCTTAGCGCTGGCGGCGG
 CGGCGCTCCAGCACCCCATCACCGGAGCACCAGCAGCAGCAGTGCAGCAGCAGCAGCAGCAGT
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 AGGGGCCAAAGTGGCTTCTTTACGGTGGAGGGCTGCGAGCTGATCTGCCTGCCAGGCTTTTCGACCTG
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 CAATGCAGCTATTGCTGAAGCAATGAAGGTGAAAAAATAAAATTAGAAGCTATGAGCAACTATCATGCC
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 AGGGAGAGCAGATGCTGAAAGGACAATACAAGATGGAAGACTGTATTTGAAAACACTGTGCATGTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG217834 representing NM_001038610
 Red=Cloning site Green=Tags(s)

MAVPAALIPPTQLVPPQPPISTASSSGTTTSTSSATSSPAPSIGPPASSGPTLFRPEPIASSASSSAAA
 TVTSPGGGGGGGGGGGGGGGNGGGGGGNCNPSLAAGSSGGGVSAAGGGASSTPITASTGSSSSSSSSSSSS
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 RPPKRTQSVTSPENSHIMPHSVPLMSPGIIPPTGLTAAAAAAAATNAAIAEAMKVKKIKLEAMSNYHA
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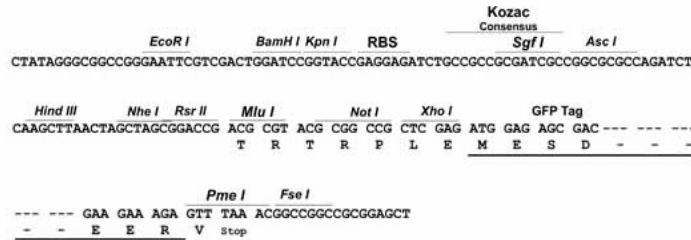
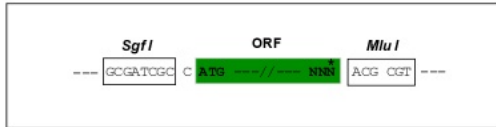
TRTRPLE - GFP Tag - V

Restriction Sites:

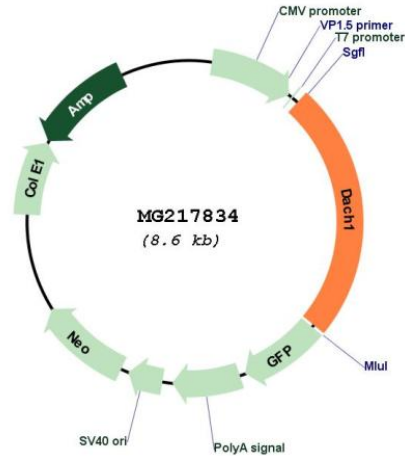
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_001038610

ORF Size: 2097 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: [NM_001038610.1](#), [NP_001033699.1](#)

RefSeq Size: 5069 bp

RefSeq ORF: 2100 bp

Locus ID: 13134

UniProt ID: [Q9QYB2](#)

Cytogenetics: 14 48.25 cM

Gene Summary: Transcription factor that is involved in regulation of organogenesis. Seems to be a regulator of SIX1, SIX6 and probably SIX5. Corepression of precursor cell proliferation in myoblasts by SIX1 is switched to coactivation through recruitment of EYA3 to the SIX1-DACH1 complex. Transcriptional activation seems also to involve association of CREBBP. Seems to act as a corepressor of SIX6 in regulating proliferation by directly repressing cyclin-dependent kinase inhibitors, including the p27Kip1 promoter. Inhibits TGF-beta signaling through interaction with SMAD4 and NCOR1 (By similarity). Binds to chromatin DNA via its DACHbox-N domain. [UniProtKB/Swiss-Prot Function]