

## Product datasheet for **MR217834**

### **Dach1 (NM\_001038610) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Dach1 (NM_001038610) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dach1
Synonyms:	Dac; Dach
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide  
Sequence:**

>MR217834 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCAGTGCCGGCGGCTTTGATCCCTCCGACCCAGCTGGTCCCCCTCAACCCCCGATCTCTACTTCTG  
 CTCCTCCTCGGGCACCACCACCTCCACCTCCTCGGCGACCTCGTCTCCGGCTCCATCCATCGGACCCCC  
 GGCGTCGTCTGGGCCAACTCTGTTCCGGCCGGAGCCATTGCCTTTCTGCTTCTTTTCCAGCCGGCC  
 ACAGTCACCTCTCCTGGTGGCGGCGGGCGGAGCGGAGGCGGCGGTGGCAGCGGGCGAACGGAGGCG  
 GCGGGGGAGCAACTGCAACCCAGCCTGGCGGCGGGAGCAGCGGCGGGCGTTAGCGCTGGCGGCGG  
 CGGCGCTCCAGCACCCCATCACCGGAGCACCAGCAGCAGCAGTGCAGCAGCAGCAGCAGCAGT  
 AGCAGCAGCAGCAGCAGTGCAGCAGCAGCAGCAGTGCAGCAGCAGTGCAGCAGCAGCAGCAGCAGT  
 AGCAGCAGCAGCAGCAGTGCAGCAGCAGCAGCAGTGCAGCAGCAGCAGCAGCAGTGCAGCAGCAGCAGCAGT  
 CCGTGTACTCAACCCCGTCCCAGTGGAAAACACCCCGAGAATAATGAGTGCAAAATGGTGGATCTGAG  
 AGGGGCCAAAGTGGCTTCTTTACGGTGGAGGGCTGCGAGCTGATCTGCCTGCCAGGCTTTGACCTG  
 TTCTTGAAGCACTTGGTGGGGGGCTTGCACACCGTCTACACCAAGCTGAAGCGGTTGGAGATCACGCCGG  
 TGGTGTGCAATGTGGAACAGGTTTCGCATCCTGAGGGGACTGGGGGCCATCCAGCCGGAGTGAACCGCTG  
 CAAACTCATCTCCAGGAAGGACTTCGAGACCCTTACAATGACTGCACCAACGCCAGTTCAGACCTGGA  
 AGGCCTCCTAAGAGGACTCAAAGTGTCACTTCCCAGAGAAGCTCTCACATCATGCCGCAATCTGTCCCTG  
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 CAATGCAGCTATTGCTGAAGCAATGAAGGTGAAAAAATAAATAAGAGCTATGAGCAACTATCATGCC  
 AGTAACAACCAACATGGAGCAGATTCTGAAAACGGGACATGAATTCAAGTGTGGACTGGAACCTCCTT  
 TTATGATGATGCCCCACCCTCTCATTCTGTGAGCCTACCTCCAGCATCTGTACCATGGCAATGAGTCA  
 GATGAACCACCTTAGCACCATGCAAATATGGCGGCGGCAGCACAAAGTTCAGAGTCCTCCATCCAGGGTG  
 GAGACATCTGTTATTAAGGAGCGTGTTCGACAGCCCTCGCCTGCTCCATCTCTGGAGGAGGGCCGGA  
 GGCCCGCAGCCACCCATCCTCACACCGCAGCAGCAGTGTGTCCAGCTCCCCGGCGGGACTGAGAGTTC  
 TTCCGACAGAAATCCCTGTCCATCAGAAATGGCCTGTCCATGAACCAGATGCTTATGGGTTTATCCCCAAAT  
 GTGCTTCTGGGCCAAAGGAGGGGATTTGGCTGGTCAAGATGGGCGCATGAGTCAAACGGATCCACA  
 TTGAAAAAGATGAGACCCCACTTCCACACCAACCGCAAGAGACAGCATCGACAACTTTCTCTAACTGG  
 GCATGGACAACCACTACCTCCCGGCTTCCATCTCCCTTTCTGTTTCTGATGGCCTGTCTCCATAGAG  
 ACCCTTCTCACTAACATACAGGGCTCTTGAAAGTTGCCATAGACAATGCCAGAGCTCAAGAAAAGCAGG  
 TCCAACCTGAAAAAACAGAGCTGAAGATGGATTTTTTAAGAGAAAGAGAACTAAGAGAAACACTGGAGAA  
 GCAGCTGGCCATGGAACAAAAGAACAGAGCCATAGTTCAAAAGAGGCTAAAGAAGGAAAAGAAAGCAAAG  
 AGAAAACCTGCAGGAGGCACTAGAATTTGAGACAAAACGCCGTGAGCAAGCAGAGCAGACTGAAACAGG  
 CAGCTTCAGCGGACAGTCTCCGGTCTTAAATGACTCCCTGACCCCTGAGATAGAAGCTGACCGCAGCGG  
 AGGGAGAGCAGATGCTGAAAGGACAATACAAGATGGAAGACTGTATTTGAAAACACTGTGCATGTAC

**ACGCGT**ACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR217834 protein sequence  
 Red=Cloning site Green=Tags(s)

```
MAVPAALIPPTQLVPPQPPISTSSASSSGTTTSTSSATSSPAPSIGPPASSGPTLFRPEPIASSASSSAAA
TVTSPGGGGGGGGGGGGGGGNCNPSLAAGSSGGGVSAAGGGASSTPITASTGSSSSSSSSSSSSSS
SSSSSSSSSSSSSSCGPLPGKPVYSTPSPVENTPQNNECKMVDLRGAKVASFTVEGCELICLPQAFDL
FLKHLVGLHTVYTKLRLEITPVVCNVEQVRILRGLGAIQPGVNRCKLISRKDFETLYNDCTNASSRPG
RPPKRTQSVTSPENSHIMPHSVPLMSPGIIPPTGLTAAAAAAAATNAIAEAMKVKKIKLEAMSNYHA
SNNQHGADESENGDMNSSVGLLELPMMPHPLIPVSLPPASVTMAMSQMNHLSTIANMAAAQVQSPSRV
ETSVIKERVDPSPAPSLLEGRRPGSHPSHRSSSVSSSPARTESSSDRIPVHQNGLSMNQMLMGLSPN
VLPGPKEGDLAGHDMGHESKRIHIEKDETPSTPTARDSIDKLSLTGHGQPLPPGFSPFLFPDGLSSIE
TLLTNIQGLLKVAIDNARAQEQVQLEKTELKMDFLRERELRETLEKQLAMEQKNRAIVQKRLKKEKAK
RKLQEALEFETKRREAEQTLKQAASADSLRVLNDSLTPETIADRSGGRADAERTIQDGRLYLKTVMY
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM\_001038610

ORF Size: 2100 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](#), [NM\\_001038610.2](#), [NP\\_001033699.1](#)

**RefSeq Size:** 5310 bp

**RefSeq ORF:** 2100 bp

**Locus ID:** 13134

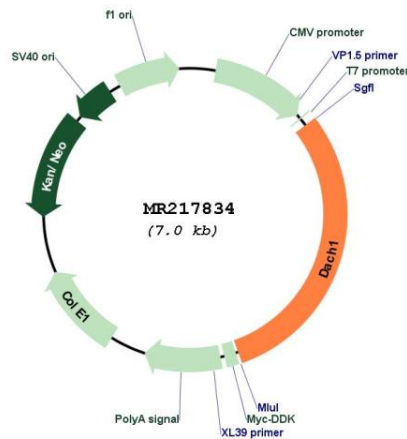
**UniProt ID:** [Q9QYB2](#)

**Cytogenetics:** 14 48.25 cM

**MW:** 72.5 kDa

**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]

### Product images:



Circular map for MR217834