

Product datasheet for **MR230263**

Dach2 (NM_001289732) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dach2 (NM_001289732) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Dach2
Synonyms:	9430028N04Rik
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR230263 representing NM_001289732
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGACAAGGAAACAAGCTGTTAACAGTTC AAGGCCTGGCAGGCCCCCTAAGCGTTCTTTGGGAGTATTGC
 AAGATAATGCCCCACTTCTGCCCATGCAGTCCCAGGCCTTTATCACCAGGACTGATCACTCCAACAGG
 TATCACAGCTGCAGCGATGGCTGAGGCCATGAAGCTCCAGAAGATGAAGCTTATGGCAATGAATACTCTT
 CAGGGTAAATGGAAGCCAAAATGGGACTGAGTCAGAGCCAGATGACCTTAATTCTACGACAGGTGGAAGTG
 AATCCTCTGGGATAAAGATAAGATAACAATCTCCACTTGTGCTTCTGGACCTCAACATGGAATTGCTCA
 TGCAGCACTTGTGGTCAGCCAGGCCTGGAGGTGCTCCGACCCTTAATCCACTTCAGCAGAATCACCTG
 CTAAGCAATCGTCTGGATCTCCATTTATGATGATGCCTCATCCCCTACTCCAGTCAGTTACCTCCTG
 CATCAGTTGCCATGGCAATGAATCAGATGAATCATCTCAATACTATTGCCAACATGGCTGCTGCAGCCCA
 GATTCACAGTCCACTCTCCAGAGCTGGTGCCTCTGTTATAAAGGAACGGATCCCAGAGAGTCCTTCTCCT
 GCTCCCTCTCTGGAAGAGAGTCATCGTCTGGGAGCCAGACCTCCTCCCAAGCAGCAGTGTGTCCA
 GCTCTCCCTCGCAGATGGATCATCATTAGAGAGAATGGTTATGATGCCCAACAATCGAGAAGAGCTTAT
 TGGTGACCAAGATAATGGACAAAGCATAAAAAAATTCAGAGGGATAATAAAGATATCCAATTGTCCAG
 CACCATTTGTTGAACACTTTTCTCACTGGATTGAGTTGGCACCATTATCAAAAAATCACTTCACCATC
 AAAAAGAAGTACCAGCTCAAATCCCAGTCATGAAGTACCCTGGATAAGATCCAGTTGGCTCCTGGACA
 GGCATTGCATCCTGGATTCCCTGGACCATTCAATTTTGCAGATAGTCTATCTTCTGTGGAGACTCTGTTG
 ACCAACATTCAGTCAACAATATTTCTATAAACAATAAATGGTCTACTGAAAGTGGCTTTGGATAATG
 CTCGTATCCAGGAGAAGCAGATTCAGCAGGAAAAGAAGGAAGTCCGAATAGAGCTTTCAGAGAAAGAGA
 AATTAGAGAAAACCTGGAGCGACAACCTTGAGTTGAGCTTCAAAGCAGAAGTACAATGCAAAAGCGTCTG
 AAAAAAGAGAAAAAGGCTAAGAGAAAACCTCAGGAAGCCTTGAATTTGAATCAAAGCGCCGCGAGCAAG
 TGGAGCAAGCACTTAAACAAGCTACATCTGGTGACAGTGGACTGAGAATGTTAAAAGATTCTGGAATTCC
 AGATATTGAAATAGAAAACAGTGAACGCCGATGACAGTGTGCTATGCAAGGAGGTAATACTATTACTGT
 TTAGCAATGGCACAGCAGTTGTGTTAGCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR230263 representing NM_001289732
 Red=Cloning site Green=Tags(s)

MTRKQAVNSSRPRPPKRS LGVLQDNARLLPHAVPGLLSPGLITPTGITAAAMAEAMKLQKMKLMAMNTL
 QNGSQNGTESEPDNLSTTGGSESSWDKDIQSPLAASGPQHGI AHAALAGQPGLGGAPTLNPLQQNHL
 LSNRLDLPFMMMPHLLPVSLPPASVAMAMNQMNLNTIANMAAAQIHSPLSRAGASVIKERIPESPSP
 APSLEESHRRPGSQTSSHPSSSVSSPSQMDHHSERMVMPNREELIVDQDNGQSIKKFQRDNKDIQLSQ
 HLLNNTFLHWIELAPLSKSLHHQKEVPAQIPVMKSPLDKIQLAPGQALHPGFPGPFIFADSLSSVETLL
 TNIQVNNISINKINGLLKVALDNARIQEKQIQEKKELRIELFREREIRENLERQLAVELQSRSTMQRK
 KKEKAKRKLQEALFEFSKRREQVEQALKQATSGDSGLRMLKDSGIPDIEIENSGTPHDSAMQGGNYC
 LAMAQQLCSA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

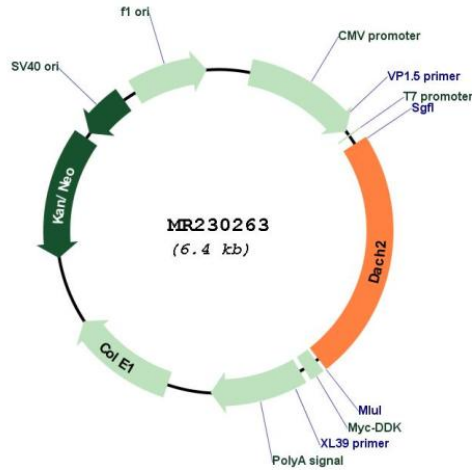
Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001289732

ORF Size: 1500 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_001289732.1](#), [NP_001276661.1](#)

RefSeq Size: 2894 bp

RefSeq ORF: 1503 bp

Locus ID: 93837

UniProt ID: [Q925Q8](#)

Cytogenetics: X 49.13 cM

MW: 55.1 kDa

Gene Summary: Transcription factor that is involved in regulation of organogenesis. Seems to be a regulator for SIX1 and SIX6. Seems to act as a corepressor of SIX6 in regulating proliferation by directly repressing cyclin-dependent kinase inhibitors, including the p27Kip1 promoter. Is recruited with SIX6 to the p27Kip1 promoter in embryonal retina. SIX6 corepression seems also to involve NCOR1, TBL1, HDAC1 and HDAC3. May be involved together with PAX3, SIX1, and EYA2 in regulation of myogenesis. In the developing somite, expression of DACH2 and PAX3 is regulated by the overlying ectoderm, and DACH2 and PAX3 positively regulate each other's expression. Probably binds to DNA via its DACHbox-N domain.[UniProtKB/Swiss-Prot Function]