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Product datasheet for MR216327

Dach1 (NM_007826) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dach1 (NM_007826) 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)

ORF Nucleotide Sequence:

>MR216327 representing NM_007826
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCAGTGCCGGCGGCTTTGATCCCTCCGACCCAGCTGGTCCCCCCTCAACCCCCGATCTCTACTTCTG
CTTCCTCCTCGGGCACCACCACCTCCACCTCCTCGGCGACCTCGTCTCCGGCTCCATCCATCGGACCCCC
GGCGTCGTCTGGGCCAACTCTGTTCCGGCCGGAGCCCATTGCCTCTTCTGCTTCTTCTTCAGCCGCGGCC
ACAGTCACCTCTCCTGGTGGCGGCGGCGGCGGCAGCGGAGGCGGCGGTGGCAGCGGCGGCAACGGAGGCG
GCGGCGGGAGCAACTGCAACCCCAGCCTGGCGGCCGGGAGCAGCGGCGGCGGCGTTAGCGCTGGCGGCGG
CGGCGCCTCCAGCACCCCCATCACCGCGAGCACCGGCAGCAGCAGCAGTAGCAGCAGCAGCAGCAGCAGT
AGCAGCAGCAGCAGCAGTAGCAGCAGCAGCAGCAGTAGCAGCAGCAGCTGCGGCCCCCTCCCTGGGAAAC
CCGTGTACTCAACCCCGTCCCCAGTGGAAAACACCCCCCAGAATAATGAGTGCAAAATGGTGGATCTGAG
AGGGGCCAAAGTGGCTTCCTTTACGGTGGAGGGCTGCGAGCTGATCTGCCTGCCCCAGGCTTTCGACCTG
TTCCTGAAGCACTTGGTGGGGGGCTTGCACACCGTCTACACCAAGCTGAAGCGGTTGGAGATCACGCCGG
TGGTGTGCAATGTGGAACAGGTTCGCATCCTGAGGGGACTGGGGGCCATCCAGCCCGGAGTGAACCGCTG
CAAACTCATCTCCAGGAAGGACTTCGAGACCCTCTACAATGACTGCACCAACGCCAGTTCCAGACCTGGA
AGGCCTCCTAAGAGGACTCAAAGTGTCACTTCCCCAGAGAACTCTCACATCATGCCGCATTCTGTCCCTG
GCCTCATGTCTCCTGGAATCATTCCACCAACAGGTCTGACTGCAGCTGCTGCAGCTGCTGCAGCTGCTAC
CAATGCAGCTATTGCTGAAGCAATGAAGGTGAAAAAAATAAAATTAGAAGCTATGAGCAACTATCATGCC
AGTAACAACCAACATGGAGCAGATTCTGAAAACGGGGACATGAATTCAAGTGTTGGCAGCAGTGGTGGTT
CTTGGGATAAGGAAACACTGCACTCTCCCCCATCCCAGGGATCCCAGGCTCCTGTTGCACATGCCCGCAT
GCCTGCAGCGTTTAGCCTTCCAGTTAGCCATCCTCTCAACCATCTGCAGCACAGCCACCTTCCGCCAAAT
GGACTGGAACTTCCTTTTATGATGATGCCCCACCCTCTCATTCCTGTCAGCCTACCTCCAGCATCTGTCA
CCATGGCAATGAGTCAGATGAACCACCTTAGCACCATTGCAAATATGGCGGCGGCAGCACAAGTTCAGAG
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CTGGAGGAGGGCCGGAGGCCCGGCAGCCACCCATCCTCACACCGCAGCAGCAGTGTGTCCAGCTCCCCGG
CGCGGACTGAGAGTTCTTCCGACAGAATCCCTGTCCATCAGAATGGCCTGTCCATGAACCAGATGCTTAT
GGGTTTATCCCCAAATGTGCTTCCTGGGCCAAAGGAGGGGGATTTGGCTGGTCATGACATGGGGCATGAG
TCAAAACGGATCCACATTGAAAAAGATGAGACCCCACTTTCCACACCAACCGCAAGAGACAGCATCGACA
AACTTTCTCTAACTGGGCATGGACAACCACTACCTCCCGGCTTCCCATCTCCCTTTCTGTTTCCTGATGG
CCTGTCCTCCATAGAGACTCTTCTCACTAACATACAGGGCCTCTTGAAAGTTGCCATAGACAATGCCAGA
GCTCAAGAAAAGCAGGTCCAACTGGAAAAAACAGAGCTGAAGATGGATTTTTTAAGAGAAAGAGAACTAA
GAGAAACACTGGAGAAGCAGCTGGCCATGGAACAAAAGAACAGAGCCATAGTTCAAAAGAGGCTAAAGAA
GGAAAAGAAAGCAAAGAGAAAACTGCAGGAGGCACTAGAATTTGAGACAAAACGCCGTGAGCAAGCGGAG
CAGACACTGAAACAGGCAGCTTCAGCGGACAGTCTCCGGGTCTTAAATGACTCCCTGACCCCTGAGATAG
AAGCTGACCGCAGCGGAGGGAGAGCAGATGCTGAAAGGACAATACAAGATGGAAGACTGTATTTGAAAAC
TACTGTCATGTAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

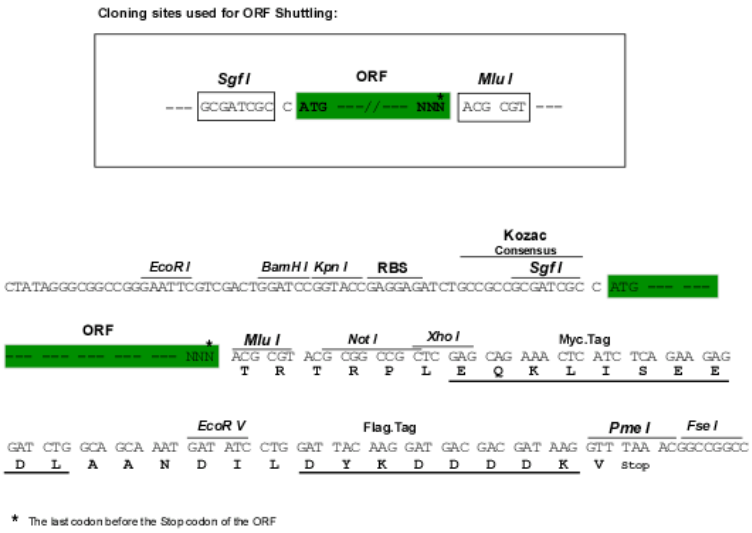
>MR216327 representing NM_007826
Red=Cloning site Green=Tags(s)

MAVPAALIPPTQLVPPQPPISTSASSSGTTTSTSSATSSPAPSIGPPASSGPTLFRPEPIASSASSSAAA
TVTSPGGGGGGSGGGGGSGGNGGGGGSNCNPSLAAGSSGGGVSAGGGGASSTPITASTGSSSSSSSSSSS
SSSSSSSSSSSSSSSSCGPLPGKPVYSTPSPVENTPQNNECKMVDLRGAKVASFTVEGCELICLPQAFDL
FLKHLVGGLHTVYTKLKRLEITPVVCNVEQVRILRGLGAIQPGVNRCKLISRKDFETLYNDCTNASSRPG
RPPKRTQSVTSPENSHIMPHSVPGLMSPGIIPPTGLTAAAAAAAAATNAAIAEAMKVKKIKLEAMSNYHA
SNNQHGADSENGDMNSSVGSSGGSWDKETLHSPPSQGSQAPVAHARMPAAFSLPVSHPLNHLQHSHLPPN
GLELPFMMMPHPLIPVSLPPASVTMAMSQMNHLSTIANMAAAAQVQSPPSRVETSVIKERVPDSPSPAPS
LEEGRRPGSHPSSHRSSSVSSSPARTESSSDRIPVHQNGLSMNQMLMGLSPNVLPGPKEGDLAGHDMGHE
SKRIHIEKDETPLSTPTARDSIDKLSLTGHGQPLPPGFPSPFLFPDGLSSIETLLTNIQGLLKVAIDNAR
AQEKQVQLEKTELKMDFLRERELRETLEKQLAMEQKNRAIVQKRLKKEKKAKRKLQEALEFETKRREQAE
QTLKQAASADSLRVLNDSLTPEIEADRSGGRADAERTIQDGRLYLKTTVMY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_007826

ORF Size: 2253 bp

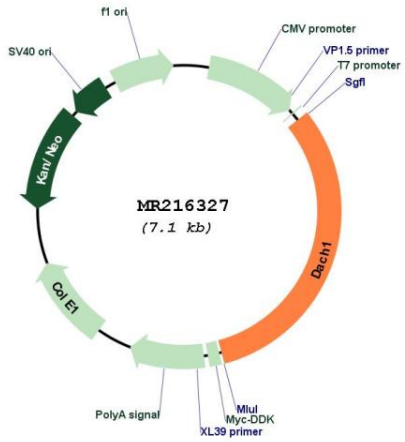
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_007826.3, NP_031852.1
RefSeq Size:	5225 bp
RefSeq ORF:	2256 bp
Locus ID:	13134
UniProt ID:	Q9QYB2
Cytogenetics:	14 48.25 cM
MW:	78.4 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 MR216327