

## Product datasheet for **MG219147**

### Dach2 (NM\_033605) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Dach2 (NM_033605) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dach2
Synonyms:	9430028N04Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG219147 representing NM\_033605  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGGCTGTCTCTGCACCTCCGGTATCTCTGCAACTCCAGCAGCGCCGGCTCCCGGGGGTTTATTCC  
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 CAGTGGAAACGCCATGACAGTGTCTATGCAAGGAGGTAACATACTGTTTAGCAATGGCACAGCAG  
 TTGTGTTACGCC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>MG219147 representing NM\_033605  
 Red=Cloning site Green=Tags(s)

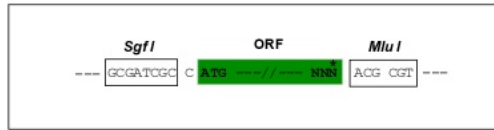
MAVSAPPVISATSSSAGVPGGLFRAEPL YSSPGEPPRLTPNMINSFMANNHNGSVLGGGIGGGSSGSSNT  
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 ETLLTNIQGLLVALDNARIQEKIQQEKELRIELFREREIRENLERQLAVELQSRSTMQRKLLKKEKKA  
 KRKLQEALFEFESKRREQVEQALKQATSGDGLRMLKDSGIPDIEIENSGTPHDSAAMQGGNYCLAMAQQ  
 LCSA

TRTRPLE – GFP Tag – V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



**ACCN:** NM\_033605

**ORF Size:** 1902 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\\_033605.2](#), [NP\\_291083.1](#)

**RefSeq Size:** 3014 bp

**RefSeq ORF:** 1905 bp

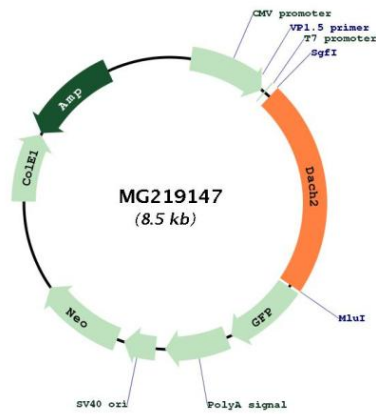
**Locus ID:** 93837

**UniProt ID:** [Q925Q8](#)

**Cytogenetics:** X 49.13 cM

**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]

**Product images:**



Circular map for MG219147