

Product datasheet for MC225077

Chd5 (NM_001081376) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Chd5 (NM_001081376) Mouse Untagged Clone
Tag: Tag Free
Symbol: Chd5
Synonyms: 4930532L22Rik; AW060752; B230399N07Rik; CHD-5
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC225077 representing NM_001081376
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGGATCGCC

ATGCGGGGCCCGCTGGGCACCGAGGAGGAGCTGCCGGCTGTTTCGGGAGGAGATGGAGAACGAGGAGG
 AGATGTCAGAAGAAGAAGACGGTGGCCCTGAAGGCTTTGAGGACTTCTCCCTGCAGAGCCCGTGAGTCT
 TCCCAAGAAGAAGCCGAAGAAGCTGAAAGAGAGCAAGTCTCCAAGGTAAAAGGAAGAAGAAAGAGGGG
 AGCAATGACGAGATGTCAGACAACGAGGAGGACCTGGAAGAGAAGTCAAGAGAGCGAAGGTAGCGACTACT
 CCCCCACCAAGAAGAAGAAGAAAGAACTGAAGGAGAAGAAGGAGAAGAAGGAGAAGAAGGAGAAGCGGAA
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GGGGAAAATCTACGAAATCTGGCACCGCGTCACGACTACTGGCTGCTGGCAGGCATTGTGACGCATGGC
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TCCACAAGGGCAACTACTTGGAGATGAAGAACAAGTTTTTGGCCCGTAGGTTCAAGCTGCTGGAGCAGGC
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AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
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Restriction Sites:

Sgfl-RsrII

ACCN:

NM_001081376

Insert Size:

5859 bp

OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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_001081376.1](#), [NP_001074845.1](#)

RefSeq Size:

9486 bp

RefSeq ORF:

5859 bp

Locus ID:

269610

Cytogenetics:

4 E2

Gene Summary:

Chromatin-remodeling protein that binds DNA through histones and regulates gene transcription. May specifically recognize and bind trimethylated 'Lys-27' (H3K27me3) and non-methylated 'Lys-4' of histone H3. Plays a role in the development of the nervous system by activating the expression of genes promoting neuron terminal differentiation. In parallel, it may also positively regulate the trimethylation of histone H3 at 'Lys-27' thereby specifically repressing genes that promote the differentiation into non-neuronal cell lineages. Tumor suppressor, it regulates the expression of genes involved in cell proliferation and differentiation. Downstream activated genes may include CDKN2A that positively regulates the p53/TP53 pathway, which in turn, prevents cell proliferation. In spermatogenesis, it probably regulates histone hyperacetylation and the replacement of histones by transition proteins in chromatin, a crucial step in the condensation of spermatid chromatin and the production of functional spermatozoa.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1). Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.