

Product datasheet for **MG226492**

Chd1 (NM_007690) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Chd1 (NM_007690) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Chd1
Synonyms: 4930525N21Rik; AI851787; AW555109
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG226492 representing NM_007690
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAATGGACACAGTGATGAAGAAAGTGTAGAAATGGCAGCGGAGAATCAAGTCAGTCAGGTGATGATT
 GTGGGTCAGCATCAGGCTCTGGATCTGGCTCGAGTTCTGGCAGCAGCAGTGACGGAAGCAGCAGCCAATC
 CGGGAGCAGCGACTCTGATTCTGGCTCTGACTCAGGAAGTCAATCAGAGTCTGAATCAGACACATCCCGA
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 TGGCTGTCCAGAGATCTGCAATGCTTAGGAAGCAGCCACAGCAGGCCCAGCAGCAGCGCCAGCTTCATC
 TAATAGTGGATCCGAAGAAGACTCGTCCAGCAGTGAAGACTCCGACGACTCGTCCAGCGGTGCCAAGAGG
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 CAGATTGATTCATCTGAGGATGAAGATGATGAAGATTATGATAATGATAAACGAAGCTCTCGCCGCAAG
 CCACCGTCAATGTGAGCTACAAGGAGGATGAAGAAATGAAAATGACTCCGATGACCTGCTGGAGGTCTG
 CGGCGGAAAGGAGCTACTGGTCTACTACAACCTTTATGCTGTCGAAGCAGATGGTGACCCAAATGCAG
 GATTTGAAAGAAACAAAGAGCCAGGAGACATACAGTATTTAATTAAGTGGAAAGGATGGTCTCACATCCA
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 AAGAAAAAAGATCAAGAGACGAAACGATGGCTGAAAAATGCTTCTCCAGAAGATGTGGAATATTATAATT
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GCTCACTCTTGGTGCAAAGGAAATAGTTGCATACTTGCTGATGAAATGGGCCTTGGGAAAACAATACAGA
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ACACCTGGAGTAGTCGGAAGACA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG226492 representing NM_007690

Red=Cloning site Green=Tags(s)

MNGHSDEESVRNGSGESSQSGDDCGSASGSGSGSSSSGSSSDGSSSSQSGSSSDSDSGSDSGSQSESESDTSR
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 KKHNDDEDWQMSGSGSPSQSGSDSESEERDKSSCDGTESDYEPKNKVRSRKPNRKSCKNGKILGQKKR
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 KKKDQETKRWLKNASPEDVEYYNCQQLTDDLHKQYQIVERIIAHSNQKSAAGLPDYCKWQGLPYSECS
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 PIAESEEELDQKTF SICKERMPVKAALKQLDRPEKGLSEREQLEHTRQCLIKIGDHITCLKEYSNPEQ
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 SRDSYSSDRHL SQYHDHKKDRHQDSYKKSRSRKPYSF SNGKDHREWDHYRQDSRYYSREKHKRLDD
 HRSREHRPSLEGGLKDRCHSDHRSHSDHRMHSDRSSSEHTHKSSRDYRYLSDWQLDHRAASSGPRSP
 DQRSPYGSRSPEFHSAEHRSTPEHTWSSRKT

TRTRPLE – GFP Tag – V

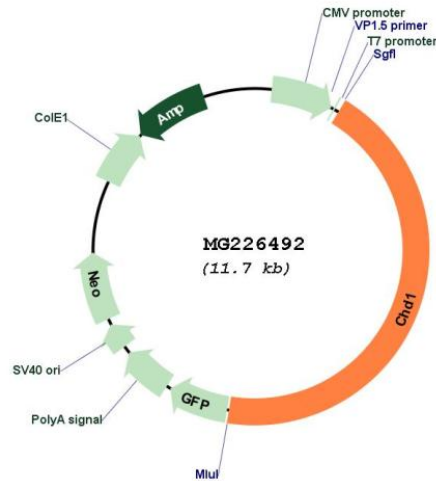
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_007690

ORF Size: 5133 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_007690.3](#), [NP_031716.2](#)

RefSeq Size: 7918 bp

RefSeq ORF: 5136 bp

Locus ID: 12648

UniProt ID: [P40201](#)

Cytogenetics: 17 8.95 cM

Gene Summary: ATP-dependent chromatin-remodeling factor which functions as substrate recognition component of the transcription regulatory histone acetylation (HAT) complex SAGA. Regulates polymerase II transcription. Also required for efficient transcription by RNA polymerase I, and more specifically the polymerase I transcription termination step. Regulates negatively DNA replication. Not only involved in transcription-related chromatin-remodeling, but also required to maintain a specific chromatin configuration across the genome. Required for the bridging of SNF2, the FACT complex, the PAF complex as well as the U2 snRNP complex to H3K4me3. Functions to modulate the efficiency of pre-mRNA splicing in part through physical bridging of spliceosomal components to H3K4me3 (By similarity). Required for maintaining open chromatin and pluripotency in embryonic stem cells (PubMed:19587682). Is also associated with histone deacetylase (HDAC) activity (PubMed:12890497).[UniProtKB/Swiss-Prot Function]