

Product datasheet for **MR222222**

Ctcf1 (NM_001081387) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ctcf1 (NM_001081387) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ctcf1
Synonyms:	Boris; OTTMUSG00000016680
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>MR222222 representing NM_001081387
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

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AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
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Protein Sequence: >MR222222 representing NM_001081387
 Red=Cloning site Green=Tags(s)

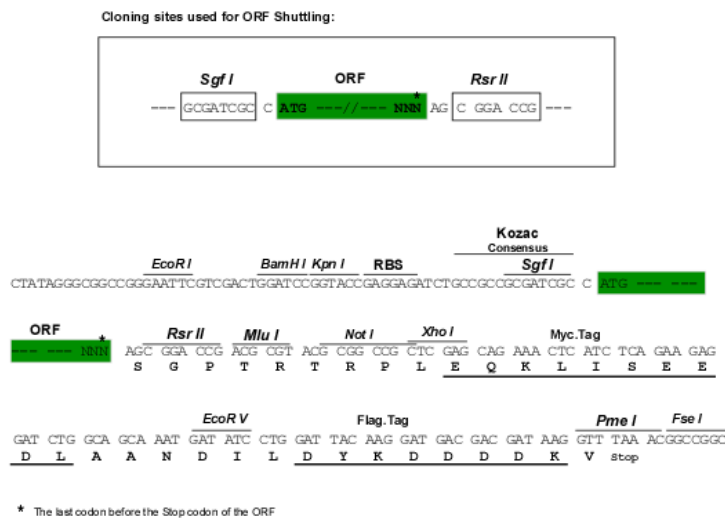
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FNMMDK
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SGP TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9047_b12.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_001081387

ORF Size: 1908 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_001081387.2](#), [NP_001074856.1](#)

RefSeq Size: 3217 bp

RefSeq ORF: 1911 bp

Locus ID: 664799

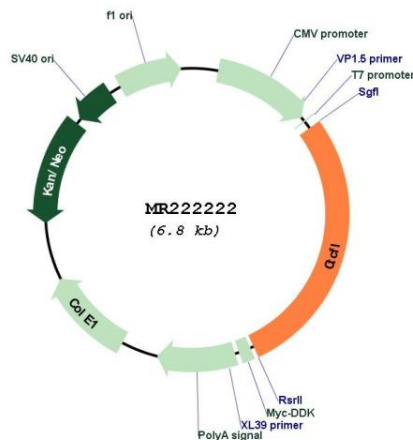
UniProt ID: [A2APF3](#)

Cytogenetics: 2 H3

MW: 73.6 kDa

Gene Summary: Testis-specific DNA binding protein responsible for insulator function, nuclear architecture and transcriptional control, which probably acts by recruiting epigenetic chromatin modifiers. Plays a key role in gene imprinting in male germline, by participating in the establishment of differential methylation at the IGF2/H19 imprinted control region (ICR). Directly binds the unmethylated H19 ICR and recruits the PRMT7 methyltransferase, leading to methylate histone H4 'Arg-3' to form H4R3sme2. This probably leads to recruit de novo DNA methyltransferases at these sites. Seems to act as tumor suppressor. In association with DNMT1 and DNMT3B, involved in activation of BAG1 gene expression by binding to its promoter. Required for dimethylation of H3 lysine 4 (H3K4me2) of MYC and BRCA1 promoters.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222222