

Product datasheet for **MC219960**

Ctcf1 (NM_001081387) Mouse Untagged Clone

Product data:

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



[View online »](#)

Fully Sequenced ORF: >MC219960 representing NM_001081387
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTGCCGCTGAGGTCCTGTCCCTTCTGGGACTTACCCAGATCAAAGAGCAGAAGTTGAAGCCTG
 GAGACCTAGAGGAGGAGAAAGAGGAGGACGGGGTACAAAGAGTGAAGCCAGGAGGGAGTTGTCAAGGA
 GGTGGAGGCCGAGAACAGTTGCCTGCTTCTGGAGGCCAGGGCCCCGGTGGAGAGCGACAGCGGATCCTG
 ACCCTGCAAACGGTGCACCTGGAGTCCCAGGATGTGCACCTACAGGGGCTGGGATGGCTGAGCGTGCCAC
 ACTCTGAGGAGCTTTCAGGGACGGTACCAGAGGCGGAAGGCATACTGCAGTTGCCATCCGTGCTGTGGCT
 CGACCCAGAGCCCCAGCTCAGCCTTTCAGCATTGCGTGACGGTACGATCCCGGAAGAGCTGTACCCACCA
 GAGGAGCTGCAGCGGATACATTTTCACCTGCTGAGAGAGAATGTGCTAATGGCCGAGGAGAACCCAGAGT
 TAACACCAGACTTGGACGAAAGCACAGCCCTGAAAAAGCCGAAGAAGATGAAAAGGACCAGCTCCCGCC
 CCAGGGAGAGACAGACAAGAGAGAAGAGAGGTTGCTCCTTCTGGAAATGAAACAAAAGAGGGAAAAGAC
 GACGAAATTGTCTGACCATTTCCCATCTAAGCCTCGAAGAACAGCAAGATCCACCAGCGCCAATCAGA
 CAAGTGTGCCGGAGCCAAAGCCGCAAAACCAAACCGGCGGAGGACACCAAGGGAAAGCCTCAGAGCTT
 TCAGTGTGACACCTGCCCGTTCACTTCCCTCAAGCTCTCAACTTTCAATCGTCACATCAAATTCACAGC
 AATGAGAGGCCACACCTGTGTCACCTGTGCCTGAAGGCCTTCCGGACTGTCACTTCTTAGGAACCATG
 TGAACACCCACACAGGAACAGGCCCAACAGTGCAGGGACTGCGACATGGCGTTTGTACCCAGTGGAGA
 ACTCGTCCGGCACAGGCGTTACAACACACTTATGAGAAGCCCTCAAGTGTCCCTGTGCAAGTACGCC
 AGCGTCGAGGCAAGCAAGATGAAGCGTACATCCGCTCACACACGGGTGAGCGTCCCTCCAGTGTGGCC
 GTATGAATGTCCACCTGTACGTCGCTTACCCAGAGCGGGACCATGAAAATCCATATAGCACAGAAG
 CACGGAGAGAATGTGCCCAAATACGAGTGTCCCACTGTGCCACCATCATCGCGAGGAAGAGCGACCTGC
 GTGTCCATCTGCGTAACCTGCACAGCCAGAGCCGGAGGAGATGAAGTCCGATACTGTCCCGCTGGCTT
 CCATGAGCGCTATGCCCTCATTGACACCAGAGGCCCAAGAACGAGAAGAAGTTCAAGTGAAGCAG
 TGCGATTACGCGTGAAGCAGGAGCGATGCTTGAAGGCGCACATGCGCATGCACACAGGAGAGAAGCCCT
 TCTCCTGCCTGGCCTGCAACAAGCACTCCGACAGAAGCAGCTACTGACCGTGCACCTGAGGAAGTACCA
 TGACCCGAACTTCGTCCCAATCTGCACCTGTGCCTCAAGTGTGATAAACGTTTCTCCCGCTGGAGTAAC
 CTGCAGAGACACAGAAAGAAGTGTGACCCGGAGCATGAGACGTTAGCCCCAACAAAGGACAGGAGACCAG
 TGACAAGGACACAGGCCCTCGGAGGGAGAAGCAGGACACAAGGAAGGGGAGCCTCAGTGCCTGGGGAGCA
 GGCTCTGGGCCACCAAGGAGAAGCAGCGGGGAGCCAGAGCCCAGACCACGGCCTTACCTGCGAGATAATC
 TTTAACATGATGGATAAG**TGA**

AG**CGGACCG**ACGCGTACGCGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-RsrII

ACCN: NM_001081387

Insert Size: 1911 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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

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 H4R3me2. 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]

Transcript Variant: This variant (2) uses an alternate in-frame 3' splice junction compared to variant 1. The resulting isoform (2) has the same N- and C-termini but is shorter compared to 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.