

## Product datasheet for MR222222L4V

## OriGene Technologies, Inc.

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## Ctcfl (NM\_001081387) Mouse Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** Ctcfl (NM\_001081387) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Ctcf

Synonyms: Boris; OTTMUSG0000016680

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_001081387

ORF Size: 1908 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(MR222222).

Sequence:
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.

**RefSeq:** <u>NM 001081387.2</u>, <u>NP 001074856.1</u>

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 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]