

Product datasheet for **RC216042**

BORIS (CTCFL) (NM_080618) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BORIS (CTCFL) (NM_080618) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BORIS
Synonyms:	BORIS; CT27; CTCF-T; dj579F20.2; HMGB1L1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC216042 representing NM_080618
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCAGCCACTGAGATCTCTGTCTTTCTGAGCAATTCACCAAGATCAAAGAACTCGAGTTGATGCCGG
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GAAGAACCAGTTATTGGCTGAAAGAACAAGGAGCAGCTCTTTTTGTGGAACAATGTCAGGAGATGAA
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GTCAAGCAGATGCTGAAAAGGCCAAATCTCAAAAAATCAAAGAAAGACAAGGGGAGCAAAAGGAACCTT
CCACTGTGATGTCTGCATGTTACCTCTTCTAGAATGTCAAGTTTAAATCGTCATATGAAAACCTCACACC
AGTGAGAAGCCTCACCTGTGCACCTCTGCCTGAAAACCTTCCGTACGGTCACTCTGCTGCGGAACCATG
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CAAGAAAGAGGAAGCAGACCATCCTGAAGGAAGCCACAAAGGGTCAAGGGAAGCTGCGAAGGGATGGAA
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GAGATGTTTCTGCTGCCTGCAGAGAAACCACAGCCAGAGTCAAAGAGGAAGTGGATGAAGGCGTGACCT
GTGAAATGCTCCTCAACACGATGGATAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216042 representing NM_080618
Red=Cloning site Green=Tags(s)

MAATEISVLSQFTKIKELELMPEKGLKEEEKDGVCREKDHRSPELEAERTSGAFQDSVLEEEVELVLA
 PSEESEKYILTLQTVHFTSEAVELQDMSLLSIQQQEGVQVVVQQPGPGLLWLEEGPRQSLQQCV AISIQQ
 ELYSPQEMEVLFHAELEENVVASEDSKLAVSLAETAGLIKLEEEQEKNQLLAERTKEQLFFVETMSGDE
 RSDEIVLTVSNSNVVEEQEDQPTAGQADA EKAKSTKNQRKTKGAKGTFHCDVCMFTSSRMSSFNRHMKTHT
 SEKPHLCHLCLKTFRTVLLRNHVNHTGT RPYKCNDCNMAFVTS GELVRHRRYKHTHEKPFKCSMCKYA
 SVEASKLKRHRSHTGERPFQCCQCSYASRD TYKLRHMRTHSGEKPYECHICHTRFTQSGTMKIHILQK
 HGENVPKYQCPHCATIIARKSDLRVHMRNLHAYSAAELKCRYCSAVFHERYALIQHQKTHKNEKRFKCKH
 CSYACKQERHMTAHIRHTHTGKPF TCLSCNKC FRQKQLLNAHFRKYHDANF IPTVYKCSKCGKGF SRWIN
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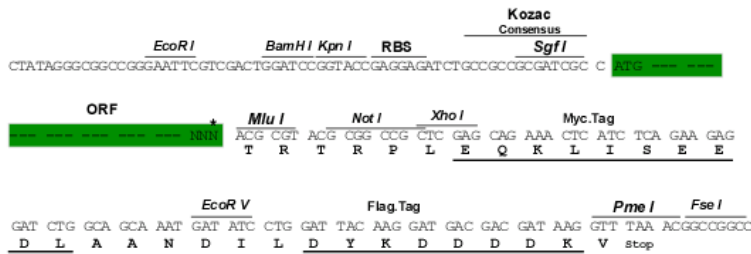
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4530_c12.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_080618

ORF Size: 1989 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](#)

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_080618.1](#)

RefSeq Size: 3493 bp

RefSeq ORF: 1992 bp

Locus ID: 140690

UniProt ID: [Q8NI51](#)

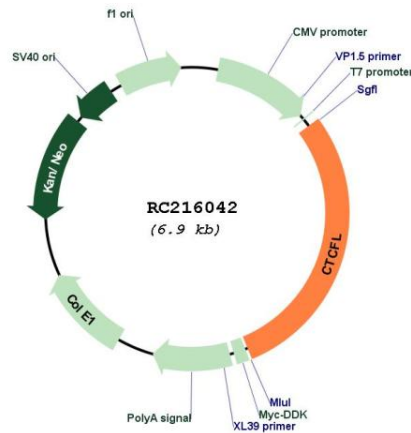
Cytogenetics: 20q13.31

Protein Families: Transcription Factors

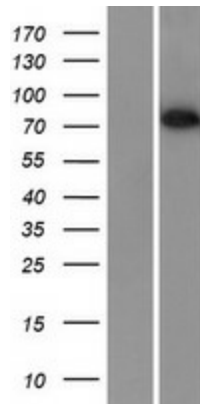
MW: 75.6 kDa

Gene Summary:

CCCTC-binding factor (CTCF), an 11-zinc-finger factor involved in gene regulation, utilizes different zinc fingers to bind varying DNA target sites. CTCF forms methylation-sensitive insulators that regulate X-chromosome inactivation. This gene is a paralog of CTCF and appears to be expressed primarily in the cytoplasm of spermatocytes, unlike CTCF which is expressed primarily in the nucleus of somatic cells. CTCF and the protein encoded by this gene are normally expressed in a mutually exclusive pattern that correlates with resetting of methylation marks during male germ cell differentiation. Multiple alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2012]

Product images:


Circular map for RC216042



Western blot validation of overexpression lysate (Cat# [LY409159]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216042 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).