

Product datasheet for RC230823L4

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OriGene Technologies, Inc.

CTCF (NM_001191022) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CTCF (NM_001191022) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: CTCF

Synonyms: CFAP108; FAP108; MRD21

Mammalian Cell Puromycin

Selection:

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

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC230823).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



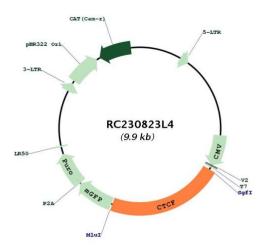


 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.





Plasmid Map:



ACCN: NM_001191022

ORF Size: 2184 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: <u>NM 001191022.1</u>, <u>NP 001177951.1</u>

RefSeq Size: 2985 bp RefSeq ORF: 1200 bp



CTCF (NM_001191022) Human Tagged Lenti ORF Clone - RC230823L4

 Locus ID:
 10664

 UniProt ID:
 P49711

 Cytogenetics:
 16q22.1

Protein Families: Transcription Factors

MW: 82.8 kDa

Gene Summary: This gene is a member of the BORIS + CTCF gene family and encodes a transcriptional

regulator protein with 11 highly conserved zinc finger (ZF) domains. This nuclear protein is able to use different combinations of the ZF domains to bind different DNA target sequences

and proteins. Depending upon the context of the site, the protein can bind a histone

acetyltransferase (HAT)-containing complex and function as a transcriptional activator or bind a histone deacetylase (HDAC)-containing complex and function as a transcriptional repressor. If the protein is bound to a transcriptional insulator element, it can block communication between enhancers and upstream promoters, thereby regulating imprinted expression. Mutations in this gene have been associated with invasive breast cancers, prostate cancers, and Wilms' tumors. Alternatively spliced transcript variants encoding different isoforms have

been found for this gene. [provided by RefSeq, Jul 2010]