

Transcriptional repressor CTCF (CTCF) Recombinant Protein | CTCF recombinant protein

Recombinant Human Transcriptional repressor CTCF (CTCF), partial

CATALOG #
AAA233490

HOST
Cell Free Expression

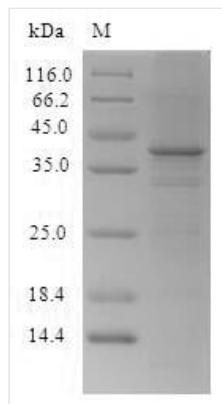
PRODUCT SYNONYMS

Transcriptional repressor CTCF (CTCF); Recombinant Human Transcriptional repressor CTCF (CTCF); partial; 11-zinc finger protein; CCCTC-binding factor; CTCFL
paralog; CTCF recombinant protein

PRODUCT SPECIFICATIONS

Host	Cell Free Expression
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Liquid containing glycerol
Sequence Positions	266-727aa; Partial
Sequence	FQCELCSYTC PRRSNLDRHM KSHTDERPHK CHLCGRAFRT VTLLRNHLNT HTGTRPHKCP DCDMAFVTSG ELVRHRRYKH THEKPFKCSM CDYASVEVSK LKRHIRSHTG ERPFQCSLCS YASRDYKLG RHMRTSHGEK PYECYICAR FTQSGTMKMH ILQKHTENVA KFHCPCDVT IARKSDLGVH LRKQHSYIEQ GKCCRYCDAV FHRYALIQH QKSHKNEKRF KCDQCDYACR QERHMIMHKR THTGEKPYAC SHCDKTRQK QLLDMHFKRY HDPNFVPAAF VCSKCGKTFT RRNTMARHAD NCAGPDGVEG ENGGETKSK RGRKRKMRK KEDSSDSENA EPDLDDNEDE EEPAVEIEPE PEPQVTPAP PPAKKRRGRP PGRTNQPKQN QPTAIQVED QNTGAIIENII VEVKKEPDAE PAEGEEEEAQ PAATDAPNGD LTPMILSMM DR
Species	Homo sapiens (Human)
Preparation and Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20 degree C/-80 degree C. The shelf life of lyophilized form is 12 months at -20 degree C/-80 degree C.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for CTCF recombinant protein	Chromatin binding factor that binds to DNA sequence specific sites. Involved in transcriptional regulation by binding to chromatin insulators and preventing interaction between promoter and nearby enhancers and silencers. Acts as transcriptional repressor binding to promoters of vertebrate MYC gene and BAG1 gene. Also binds to the PLK and PIM1 promoters. Acts as a transcriptional activator of APP. Regulates APOA1/C3/A4/A5 gene cluster and controls MHC class II gene expression. Plays an essential role in oocyte and preimplantation embryo development by activating or repressing transcription. Seems to act as tumor suppressor. Plays a critical role in the epigenetic regulation. Participates in the allele-specific gene expression at the imprinted IGF2/H19 gene locus. On the maternal allele, binding within the H19 imprinting control region (ICR) mediates maternally inherited higher-order chromatin conformation to restrict enhancer access to IGF2. Plays a critical role in gene silencing over considerable distances in the genome. Preferentially interacts with unmethylated DNA, preventing spreading of CpG methylation and maintaining methylation-free zones. Inversely, binding to target sites is prevented by CpG methylation. Plays a important role in chromatin remodeling. Can dimerize when it is bound to different DNA sequences, mediating long-range chromatin looping. Mediates interchromosomal association between IGF2/H19 and WSB1/NF1 and may direct distant DNA segments to a common transcription factory. Causes local loss of histone acetylation and gain of histone methylation in the beta-globin locus, without affecting transcription. When bound to chromatin, it provides an anchor point for nucleosomes positioning. Seems to be essential for homologous X-chromosome pairing. May participate with Tsix in establishing a regulatable epigenetic switch for X chromosome inactivation. May play a role in preventing the propagation of stable methylation at the escape genes from X- inactivation. Involved in sister chromatid cohesion. Associates with both centromeres and chromosomal arms during metaphase and required for cohesin localization to CTCF sites. Regulates asynchronous replication of IGF2/H19. Plays a role in the recruitment of CENPE to the pericentromeric/centromeric regions of the chromosome during mitosis
Product Categories/Family for CTCF recombinant protein	Transmembrane Protein
References	"An exceptionally conserved transcriptional repressor, CTCF, employs different combinations of zinc fingers to bind diverged promoter sequences of avian and mammalian c-myc oncogenes." Filippova G.N., Fagerlie S., Klenova E.M., Myers C., Dehner Y., Goodwin G., Neiman P.E., Collins S.J., Lobanenko V.V. Mol. Cell. Biol. 16:2802-2813(1996)

NCBI AND UNIPROT INFORMATION

NCBI GI #	300388142
NCBI GeneID	10664
NCBI Accession #	NP_001177951.1
NCBI GenBank Nucleotide #	NM_001191022.1
UniProt Accession #	P49711 ; Q53XI7 ; Q59EL8 ; B5MC38
Molecular Weight	57.4 kDa
NCBI Official Full Name	transcriptional repressor CTCF isoform 2
NCBI Official Synonym Full Names	CCCTC-binding factor
NCBI Official Symbol	CTCF
NCBI Official Synonym Symbols	MRD21
NCBI Protein Information	transcriptional repressor CTCF
UniProt Protein Name	Transcriptional repressor CTCF
UniProt Gene Name	CTCF

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.