



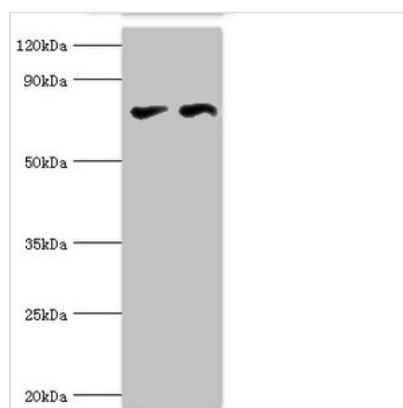
CTCF Antibody

Product Code	CSB-PA006138DSR2HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P49711
Immunogen	Recombinant Human Transcriptional repressor CTCF protein (1-260AA)
Raised In	Rabbit
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC, ChIP; Recommended dilution: WB:1:1000-1:5000, IHC:1:20-1:200
Relevance	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.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.



Purification Method	Antigen Affinity Purified
Isotype	IgG
Clonality	Polyclonal
Alias	Transcriptional repressor CTCF (11-zinc finger protein) (CCCTC-binding factor) (CTCFL paralog), CTCF
Species	Human
Research Area	Epigenetics and Nuclear Signaling
Target Names	CTCF

Image



Western blot

All lanes: Transcriptional repressor CTCF antibody at 6 μ g/ml

Lane 1: PC-3 whole cell lysate

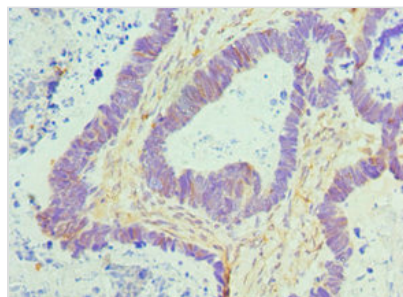
Lane 2: MCF-7 whole cell lysate

Secondary

Goat polyclonal to rabbit IgG at 1/10000 dilution

Predicted band size: 83, 46 kDa

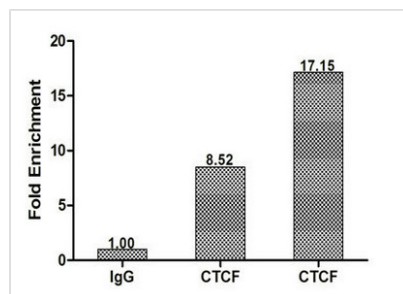
Observed band size: 83 kDa



Immunohistochemistry of paraffin-embedded

human ovarian cancer using CSB-

PA006138DSR2HU at dilution of 1:100



Chromatin Immunoprecipitation HeLa (1.2*10⁶)

were cross-linked with formaldehyde, sonicated, and immunoprecipitated with 4 μ g anti-CTCF or a control normal rabbit IgG. The resulting ChIP DNA was quantified using real-time PCR with primers (CSB-PP006138HU) against the H19ICR promoter.