Datasheet for ABIN7172779

anti-CTCF antibody (AA 1-260)

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Overview

Quantity:	100 µL
Target:	CTCF
Binding Specificity:	AA 1-260
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CTCF antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Chromatin Immunoprecipitation (ChIP)

Product Details

Immunogen:	Recombinant Human Transcriptional repressor CTCF protein (1-260AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	Antigen Affinity Purified

Target Details

Target:	CTCF
Alternative Name:	CTCF (CTCF Products)
Background:	Background: Chromatin binding factor that binds to DNA sequence specific sites. Involved in

Target Details

	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. Aliases: 11 zinc finger protein antibody, 11 zinc finger transcriptional repressor antibody, 11-zinc finger protein antibody, CCCTC binding factor (zinc finger protein) antibody, CCCTC binding factor antibody, CCCTC-binding factor antibody, Ctcf antibody, CTCF_HUMAN antibody, CTCFL paralog antibody, MRD21 antibody, Transcriptional repressor CTCF antibody
UniProt:	P49711

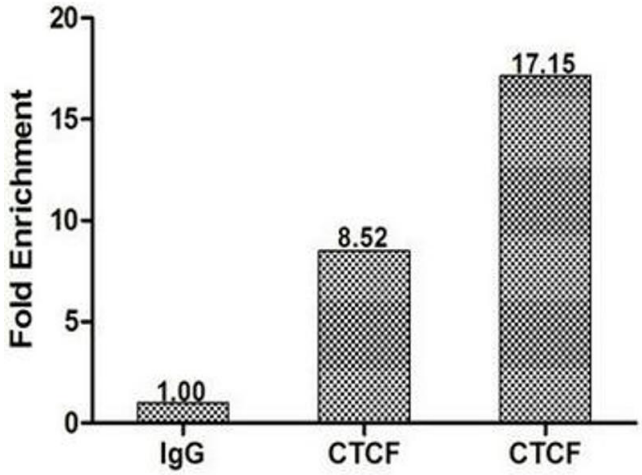
Application Details

Application Notes:	Recommended dilution: WB:1:1000-1:5000, IHC:1:20-1:200,
Restrictions:	For Research Use only

Handling

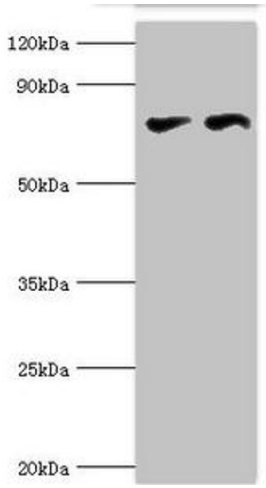
Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide, 50 % glycerol, pH 7.3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



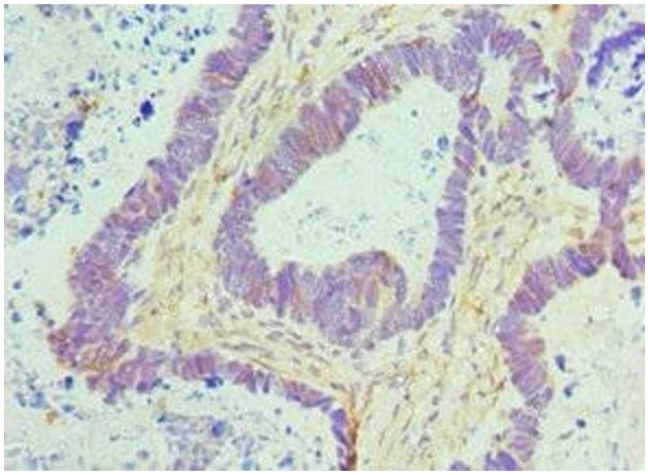
Immunohistochemistry

Image 1. Chromatin Immunoprecipitation Hela (1.2*10 6) were cross-linked with formaldehyde, sonicated, and immunoprecipitated with 4 µg anti-CTCF or a control normal rabbit IgG. The resulting ChIP DNA was quantified using real-time PCR with primers against the H19ICR promoter.



Western Blotting

Image 2. Western blot All lanes: Transcriptional repressor CTCF antibody at 6 µg/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

Image 3. Immunohistochemistry of paraffin-embedded human ovarian cancer using ABIN7172779 at dilution of 1:100

