Datasheet for ABIN6243084

anti-CTCF antibody (AA 445-727)

1 Image

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Overview

Quantity:	200 µL
Target:	CTCF
Binding Specificity:	AA 445-727
Reactivity:	Human, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CTCF antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	This CTCF antibody is generated from a mouse immunized with a recombinant protein between 445-727 amino acids from human CTCF.
Clone:	1723CT382-14-9
Isotype:	IgG1 kappa
Purification:	This antibody is purified through a protein G column, followed by dialysis against PBS.

Target Details

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

Target Details

	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.
Molecular Weight:	82785
UniProt:	P49711

Application Details

Application Notes:	WB: 1:4000
Restrictions:	For Research Use only

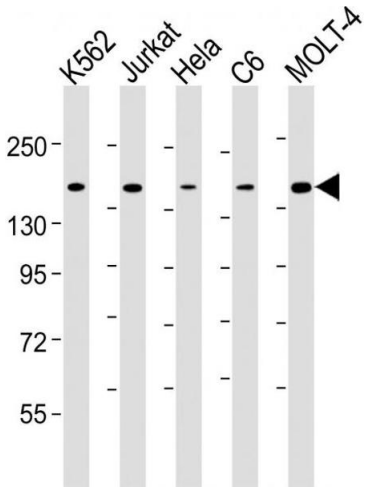
Handling

Format:	Liquid

Handling

Buffer:	Purified monoclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
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:	4 °C,-20 °C
Expiry Date:	6 months

Images



Western Blotting

Image 1. All lanes : Anti-CTCF Antibody at 1:4000 dilution Lane 1: K562 whole cell lysate Lane 2: Jurkat whole cell lysate Lane 3: Hela whole cell lysate Lane 4: C6 whole cell lysate Lane 5: MOLT-4 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 83 kDa Blocking/Dilution buffer: 5 % NFDM/TBST.