


Anti-CTCF antibody ab70303

★★★★★ [12 Abreviews](#) [75 References](#) [4 图像](#)

概述

产品名称	Anti-CTCF抗体
描述	兔多克隆抗体to CTCF
宿主	Rabbit
经测试应用	适用于: IHC-Fr, WB, IP, IHC-P
种属反应性	与反应: Mouse, Human 预测可用于: Rat, Cow, Pig, Chimpanzee, Rhesus monkey, Gorilla, Orangutan, Elephant 
免疫原	Synthetic peptide corresponding to Human CTCF aa 650-750. Database link: P49711
阳性对照	IP: Jurkat whole cell lysate. IHC-P: Human lung cancer tissue, mouse renal cancer tissue. WB: Jurkat, HEK293T and HeLa whole cell lysate.
常规说明	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
存储溶液	pH: 6.8 Preservative: 0.09% Sodium azide Constituents: 1.815% Tris, 1.764% Sodium citrate, 0.021% PBS
纯度	Immunogen affinity purified
纯化说明	ab70303 was affinity purified using an epitope specific to CTCF immobilized on solid support.
克隆	多克隆
同种型	IgG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab70303于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-Fr	★★★★★ (1)	Use at an assay dependent concentration.
WB	★★★★★ (5)	1/2500 - 1/10000. Detects a band of approximately 100 kDa (predicted molecular weight: 83 kDa).
IP		Use at 2-5 µg/mg of lysate.
IHC-P	★★★★★ (1)	1/100 - 1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

靶标

功能

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 to 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.

组织特异性

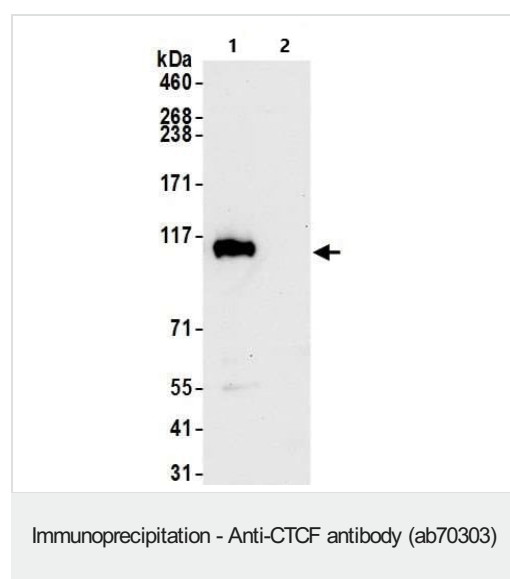
Ubiquitous. Absent in primary spermatocytes.

序列相似性

Belongs to the CTCF zinc-finger protein family.
Contains 11 C2H2-type zinc fingers.

结构域	The 11 zinc fingers are highly conserved among vertebrates, exhibiting almost identical amino acid sequences. Different subsets or combination of individual zinc fingers gives the ability to CTCF to recognize multiple DNA target sites.
翻译后修饰	Sumoylated on Lys-74 and Lys-689; sumoylation of CTCF contributes to the repressive function of CTCF on the MYC P2 promoter.
细胞定位	Nucleus > nucleoplasm. Chromosome. Chromosome > centromere. May translocate to the nucleolus upon cell differentiation. Associates with both centromeres and chromosomal arms during metaphase. Associates with the H19 ICR in mitotic chromosomes. May be preferentially excluded from heterochromatin during interphase.

图片



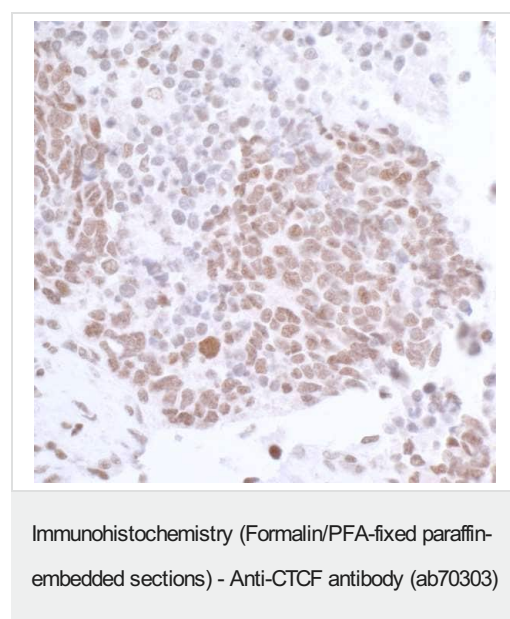
CTCF was immunoprecipitated from 1 mg Jurkat whole cell lysate with ab70303 at 6 µg per reaction. Western blot was performed on the immunoprecipitate using ab70303 at 0.02 µg/mL.

Lane 1: ab70303 IP in Jurkat whole cell lysate.

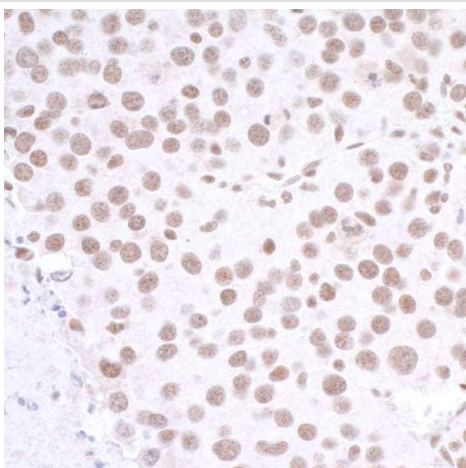
Lane 2: Control IgG in Jurkat whole cell lysate.

Detection: Chemiluminescence.

Exposure time: 10 seconds.

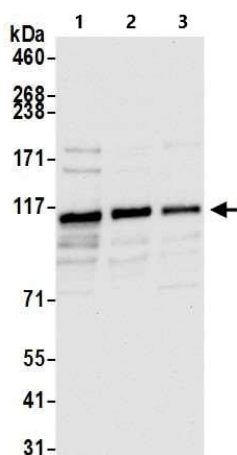


Immunohistochemical analysis of formalin-fixed, paraffin-embedded human small cell lung cancer tissue, labeling CTCF with ab70303 at a 1/1000 dilution. HRP-conjugated goat anti-rabbit IgG was used as a secondary antibody.



Immunohistochemical analysis of formalin-fixed, paraffin-embedded mouse renal cancer tissue, labeling CTCTF with ab70303 at a 1/1000 dilution. HRP-conjugated goat anti-rabbit IgG was used as a secondary antibody.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CTCF antibody (ab70303)



Western blot - Anti-CTCF antibody (ab70303)

All lanes : Anti-CTCF antibody (ab70303) at 0.02 µg/ml

Lane 1 : Jurkat whole cell lysate

Lane 2 : HEK293T whole cell lysate

Lane 3 : HeLa whole cell lysate

Lysates/proteins at 50 µg per lane.

Exposure time: 10 seconds

Detection: Chemiluminescence.

Lysates prepared using NETN lysis buffer.

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