abcam

Product datasheet

Anti-CTCF antibody [mAbcam 37477] ab37477

7 References 画像数 2

製品の概要

製品名 Anti-CTCF antibody [mAbcam 37477]

製品の詳細 Mouse monoclonal [mAbcam 37477] to CTCF

由来種 Mouse

特異性 This antibody has previously been successfully used in western blot after immunoprecipitation

from mouse NIH3T3 lysates. Please see Yao H et al. Genes Dev 24:2543-55 (2010) PMID:

20966046 for more details.

アプリケーション **適用あり**: WB

適用なし: Flow Cyt

種交差性 交差種: Human

交差が予測される動物種: Mouse 🔷

免疫原 Recombinant fragment corresponding to Human CTCF aa 1-300 (N terminal).

ポジティブ・コントロール This antibody gave a positive signal in MCF7 whole cell lysate and HeLa whole cell lysate.

特記事項 CTCF is known to migrate by SDS-PAGE at 130 kDa (PMID: 9016583) We can conjugate this

antibody to FITC for you (please see ab150242 for details).

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or $% \left(1\right) =\left(1\right) +\left(1\right)$

conjugation for your experiments, please contact ${\underline{\tt orders@abcam.com}}.$

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.

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

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

バッファー pH: 7.40

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Preservative: 0.02% Sodium azide

Constituent: PBS

精製度 IgG fraction ポリモノ モノクローナル

クローン名 mAbcam 37477

₹IП-₹ Sp2/0-Ag14

アイソタイプ lgG1 軽鎖の種類 kappa

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab37477の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 100 kDa (predicted molecular weight: 83 kDa).

追加情報 Is unsuitable for Flow Cyt.

ターゲット情報

機能

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.

Ubiquitous. Absent in primary spermatocytes.

配列類似性 Belongs to the CTCF zinc-finger protein family.

Contains 11 C2H2-type zinc fingers.

ドメイン 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.

翻訳後修飾 Sumoylated on Lys-74 and Lys-689; sumoylation of CTCF contributes to the repressive function of

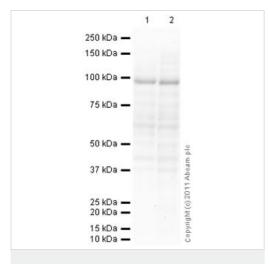
CTCF on the MYC P2 promoter.

細胞内局在 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.

画像



Western blot - Anti-CTCF antibody [mAbcam 37477] (ab37477)

All lanes: Anti-CTCF antibody [mAbcam 37477] (ab37477) at 5 µg/ml

Lane 1: MCF7 (Human breast adenocarcinoma cell line) Whole

Cell Lysate

Lane 2: HeLa (Human epithelial carcinoma cell line) Whole Cell

Lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes: Goat Anti-Mouse IgG H&L (HRP) preadsorbed

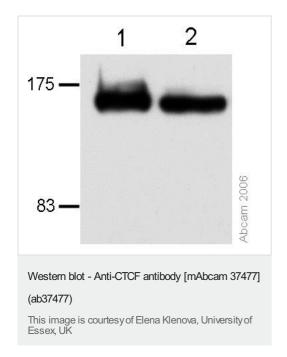
(ab97040) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 83 kDa

Exposure time: 90 seconds



All lanes : Anti-CTCF antibody [mAbcam 37477] (ab37477) at 2 µg/ml

Lane 1: ZR-75-1 cell extract

Lane 2: HCT-116 cell extract

Predicted band size: 83 kDa

ab37477 recognises a band at approximately 130 kDa corresponding to CTCF.

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