

CTCF Rabbit mAb

Catalog No.: A19588

Recombinant

1 Publications

Basic Information

Observed MW

140kDa

Calculated MW

83kDa

Category

Primary antibody

Applications

ELISA, WB, IF/ICC, IP, ChIP, CUT&Tag, ChIP-seq

Cross-Reactivity

Human, Mouse, Rat

CloneNo number

ARC0067


Background

This gene is a member of the BORIS + CTCF gene family and encodes a transcriptional regulator protein with 11 highly conserved zinc finger (ZF) domains. This nuclear protein is able to use different combinations of the ZF domains to bind different DNA target sequences and proteins. Depending upon the context of the site, the protein can bind a histone acetyltransferase (HAT)-containing complex and function as a transcriptional activator or bind a histone deacetylase (HDAC)-containing complex and function as a transcriptional repressor. If the protein is bound to a transcriptional insulator element, it can block communication between enhancers and upstream promoters, thereby regulating imprinted expression. Mutations in this gene have been associated with invasive breast cancers, prostate cancers, and Wilms' tumors. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

Recommended Dilutions

WB 1:500 - 1:2000**IF/ICC** 1:50 - 1:200**IP** 0.5µg-4µg antibody for
200µg-400µg extracts of
whole cells**ChIP** 3µg antibody for
10µg-15µg of Chromatin**CUT&Tag** 10⁵ cells /2 µg**ChIP-seq** 1:50 - 1:100

Contact

 | 400-999-6126 | cn.market@abclonal.com.cn | www.abclonal.com.cn

Immunogen Information

Gene ID

10664

Swiss Prot

P49711

Immunogen

A synthetic peptide corresponding to a sequence within amino acids 628-727 of human CTCF (P49711).

Synonyms

MRD21; FAP108; CFAP108; CTCF

Product Information

Source

Rabbit

Isotype

IgG

Purification

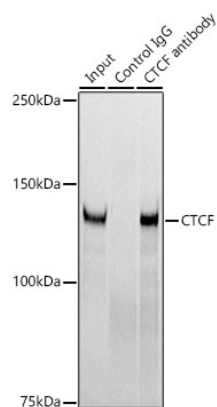
Affinity purification

Storage

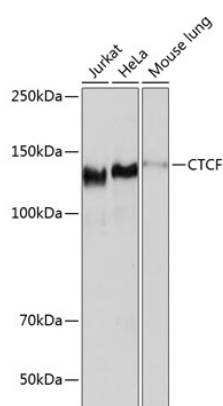
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

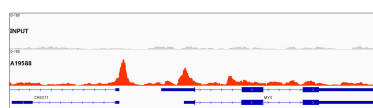
Validation Data



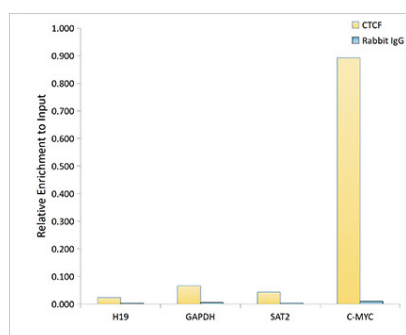
Immunoprecipitation analysis of 300 µg extracts of 293T cells using 3 µg CTCF antibody (A19588). Western blot was performed from the immunoprecipitate using CTCF antibody (A19588) at a dilution of 1:1000.



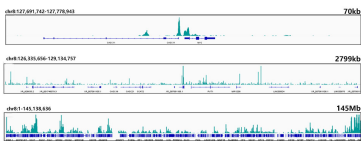
Western blot analysis of various lysates using CTCF Rabbit mAb (A19588) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 30s.



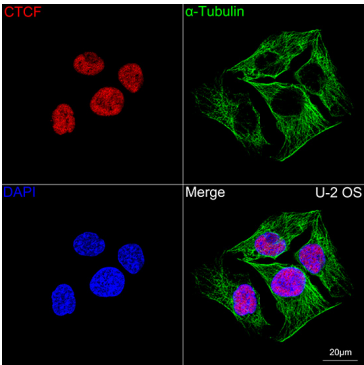
Chromatin immunoprecipitations were performed with cross-linked chromatin from 293T cells and CTCF Rabbit mAb (A19588). The ChIP sequencing results indicate the enrichment pattern of CTCF in selected genomic region and representative gene loci (MYC), as shown in figure.



Chromatin immunoprecipitation analysis of extracts of 293T cells, using CTCF antibody (A19588) and rabbit IgG. The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.



CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina (RK20265) from 10⁵ K562 cells with 2 ug CTCF Rabbit mAb along with a Goat Anti-Rabbit IgG(H+L). The CUT&Tag results indicate the enrichment pattern of CTCF in representative gene loci (MYC), as shown in figure.



Confocal imaging of U-2 OS cells using CTCF Rabbit mAb (A19588, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.