

A19588

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CTCF Rabbit mAb

Catalog No.: A19588

Recombinant

5 Publications

Basic Information

Observed MW

140kDa/

Calculated MW

83kDa

Category

SMab Recombinant Monoclonal
Antibody

Applications

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

Cross-Reactivity

Human,Mouse,Rat

CloneNo number

ARC0067

Recommended Dilutions

WB 1:1000 - 1:2000

IF/ICC 1:200 - 1:800

IP 0.5µg-4µg antibody for
200µg-400µg extracts
of whole cells

ELISA Recommended starting
concentration is 1
µg/mL. Please optimize
the concentration
based on your specific
assay requirements.

ChIP 3µg antibody for
10µg-15µg of
Chromatin

ChIP-seq 1:50 - 1:100

CUT&Tag 10⁵ cells /2 µg

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.

Immunogen Information

Gene ID

10664

Swiss Prot

P49711

Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

MRD21; FAP108; CFAP108; CTCF

Product Information

Source

Rabbit

Isotype

IgG

Purification


Affinity purification

Storage

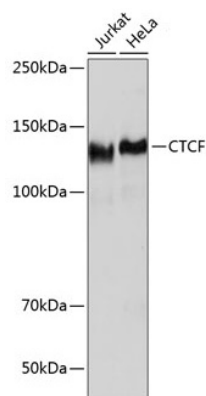
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.09% sodium azide,0.05% BSA,50% glycerol,pH7.3.

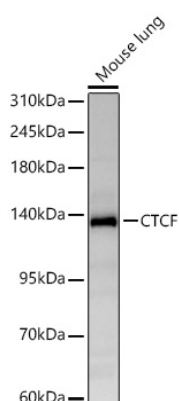
Contact

 www.abclonal.com

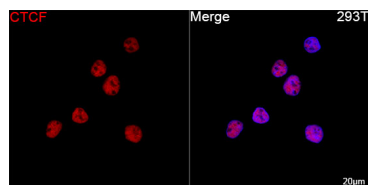
Validation Data



Western blot analysis of various lysates using CTCF Rabbit mAb (A19588) at 1:1000 dilution.
Secondary antibody: HRP-conjugated 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.

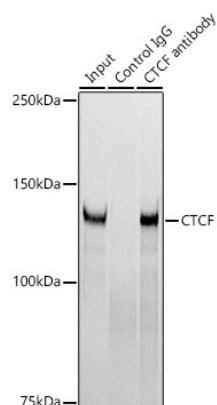


Western blot analysis of lysates from Mouse lung using CTCF Rabbit mAb (A19588) at 1:1000 dilution incubated overnight at 4°C.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 45s.

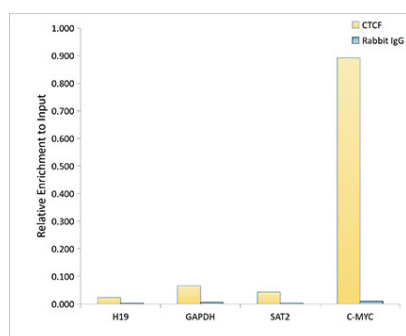


Confocal imaging of 293T cells using CTCF Rabbit mAb (A19588, dilution 1:2000) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.

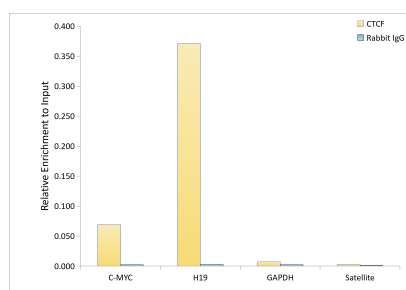
Validation Data



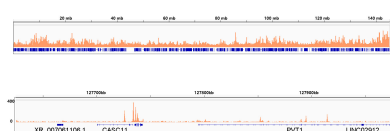
Immunoprecipitation analysis of 300 µg extracts of 293T cells using 3 µg CTCF antibody (A19588). Western blot was performed from the immunoprecipitate using CTCF antibody (A19588) at a dilution of 1:1000.



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.



Chromatin immunoprecipitation was performed with 15 µg of cross-linked chromatin from HeLa, using 5 µg of CTCF Rabbit mAb (A19588) and Rabbit IgG isotype control (AC042). The enrichment of immunoprecipitated DNA at different genomic loci was examined by quantitative PCR. The histogram compares the ratio of the immunoprecipitated DNA to the input at given loci.



Chromatin immunoprecipitation was performed with 25 µg of cross-linked chromatin from 293T cells using 5 µg of CTCF Rabbit mAb (A19588). DNA libraries were prepared using Scale ssDNA-seq Lib Prep Kit for Illumina V2 (RK20228). The ChIP sequencing results indicate the enrichment pattern of CTCF across chromosome 8 (upper panel) and the genomic region encompassing MYC, a representative gene enriched in CTCF (lower panel).

Validation Data



CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina (RK20265) from 10⁵ K562 cells with 2 µg of CTCF Rabbit mAb (A19588), followed by incubation with Goat Anti-Rabbit IgG(H+L)(AS070). The results denote the enrichment pattern of CTCF around MYC gene.

CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina (RK20265) from 10⁵ K562 cells with 2ug µg of CTCF Rabbit mAb (A19588), followed by incubation with Goat Anti-Rabbit IgG(H+L)(AS070). The CUT&Tag results denote the enrichment pattern of CTCF across chromosome 8 (upper panel) and the genomic region encompassing MYC, a representative gene enriched in CTCF (lower panel).