Order online now!

www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 600-401-C42

CTCF Antibody

Overview

Description:	Anti-CTCF (RABBIT) Antibody - 600-401-C42
Item No.:	600-401-C42
Size:	100 µg
Applications:	ELISA, IHC, WB, ChIP
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	Transcriptional repressor CTCF (also known as CCCTC-binding factor) is a transcription factor encoded by the CTCF gene. The CTCF, and the closely related Brother of the Regulator of Imprinted Sites (BORIS), are highly conserved zinc finger proteins implicated in diverse regulatory functions, including transcriptional activation/repression, insulation, imprinting, and X chromosome inactivation. Expression of BORIS is restricted to spermatocytes and is mutually exclusive of CTCF expression. CTCF is ubiquitously expressed in higher eukaryotes and contains a highly conserved and eleven zinc finger central DNA-binding domain, having very high homology between mouse, chicken, and human and is embedded within slightly divergent N and C termini. CTFC plays a critical role in the epigenetic regulation and chromatin remodeling. CTCF has been reported to bind to a variety of DNA target sites that perform distinct functions, including promoter activation or repression, hormone-responsive gene silencing, methylation-dependent chromatin insulation, and genomic imprinting.
Synonyms:	rabbit anti-CTCF Antibody, Transcriptional repressor CTCF, 11-zinc finger protein, CCCTC-binding factor, CTCFL paralog
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	CTCF
Reactivity:	Human, Mouse

Immunogen Type:	Conjugated Peptide
Immunogen:	CTCF affinity purified antibody was prepared by repeated immunizations with a synthetic peptide corresponding to a region near the C-terminus of CTCF protein.
Purity/Specificity:	Anti-CTCF was affinity purified from monospecific antiserum by immunoaffinity chromatography. This antibody reacts with endogenous CTCF protein. A BLAST analysis was used to suggest reactivity with CTCF from human, mouse, horse, bovine, panda, rabbit, Danio, and chicken based on a 100% homology with the immunizing sequence. Cross-reactivity with CTCF from other sources has not been determined.
Relevant Links:	• UniProtKB - P49711 • NCBI - NP_006556.1 • GeneID - 10664

Application Details

Tested Applications:	ELISA, IHC, WB
Suggested Applications:	ChIP (Based on references)
Application Note:	CTCF antibody has been tested by ELISA, Immunohistochemistry, and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 82.8 kDa or 150 kDa in size corresponding to CTCF by western blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000-1:50,000
IHC:	5µg/mL
WB:	1:500-1:2:000

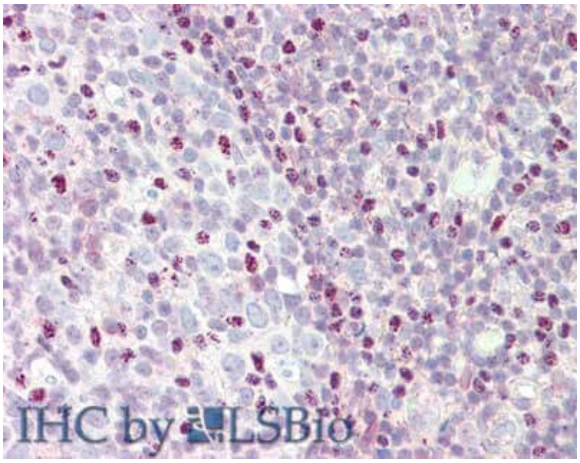
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

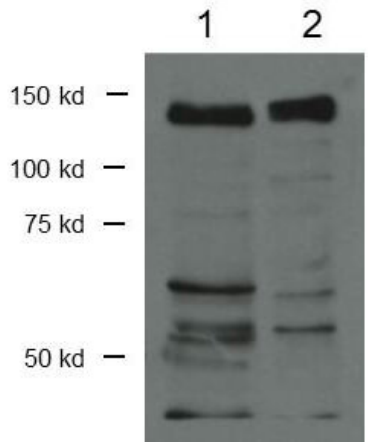
Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store CTCF antibody at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

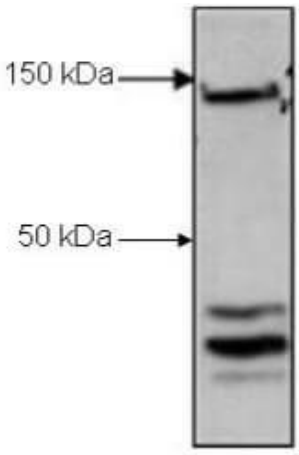
Images



Immunohistochemistry
Immunohistochemistry of rabbit anti-CTCF antibody. Tissue: tonsil. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Anti-CTCF at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: CTCF as precipitated red signal with hematoxylin purple nuclear counterstain.



Western Blot
Western Blot of Rabbit Anti-CTCF Antibody. Lane 1: P3XAg nuclear lysate. Lane 2: Flag-CTCF. Load: 30 µg per lane. Primary antibody: CTCF antibody at 1:1000 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 82.8 kDa or 150 kDa for CTCF. Other band(s): CTCF splice variants.



Western Blot
Western Blot of Rabbit Anti-CTCF antibody. Lane 1: H929 nuclear cell lysates. Load: 30 µg per lane. Primary antibody: CTCF antibody at 1.2 µg/mL for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:5,000 for 45 min at RT. Block: 3% BSA overnight at 4°C. Predicted/Observed size: 82.8 kDa or 150 kDa for CTCF. Other band(s): CTCF splice variants.

References

- Majumder et al. Domain-Specific and Stage-Intrinsic Changes in Tcrb Conformation during Thymocyte Development. *Journal of Immunology* (2015)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.