

# Rabbit anti-human CTCF Polyclonal Antibody

Catalog Number: R16028P

General Information	
<b>Immunogen</b>	Recombinant protein of human CTCF
<b>IgG type</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Specificity</b>	human CTCF
<b>Applications &amp; dilution</b>	WB 1:500 - 1:2000 IHC 1:50 - 1:200 IP 1:20 - 1:50 ChIP 1:20 - 1:100
<b>Formulation</b>	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
<b>Purity</b>	≥95% purity by SDS-PAGE
<b>Storage</b>	Store at -20°C. Avoid freeze / thaw cycles.
<b>Abbreviation:</b> ELISA: Enzyme-linked immunosorbent assay; ITA: immunoturbidimetric assay; IP: immunoprecipitation; IHC: immunohistochemistry; IF: immunofluorescence. WB: western blot; FC: flowcytometry	

## Background

CCCTC-binding factor (CTCF) and its paralog, the Brother of the Regulator of Imprinted Sites (BORIS), are highly conserved transcription factors that regulate transcriptional activation and repression, insulator function, and imprinting control regions (ICRs). Although they have divergent amino and carboxy termini, both proteins contain 11 conserved zinc finger domains that work in combination to bind the same DNA elements (1). CTCF is ubiquitously expressed and contributes to transcriptional regulation of cell-growth regulated genes, including c-myc, p19/ARF, p16/INK4A, BRCA1, p53, p27, E2F1, and TERT (1). CTCF also binds to and is required for the enhancer-blocking activity of all known insulator elements and ICRs, including the H19/Igf2, Prader-Willi/Angelman syndrome, and Inactive X-Specific Transcript (XIST) anti-sense loci. CTCF DNA-binding is sensitive to DNA methylation, a mark that determines selection of the imprinted allele (maternal vs. paternal). The various functions of CTCF are regulated by at least two different post-translational modifications. Poly(ADP-ribosyl)ation of CTCF is required for insulator function. Phosphorylation of Ser612 by protein kinase CK2 facilitates a switch of CTCF from a transcriptional repressor to an activator at the c-myc promoter.

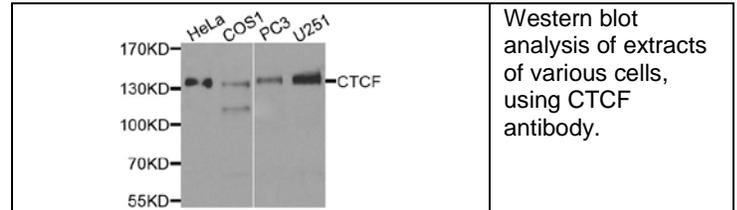
**For research use only**

## Preparation

Polyclonal antibody is produced by immunizing rabbit with recombinant protein of human CTCF and purified using protein A resin.

## Applications

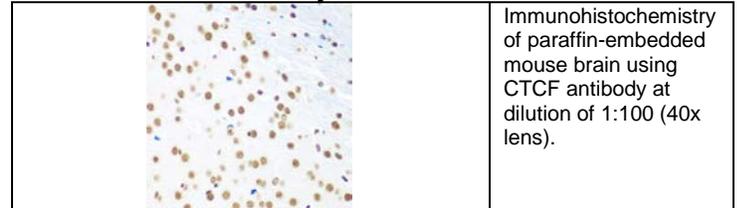
### Western blot



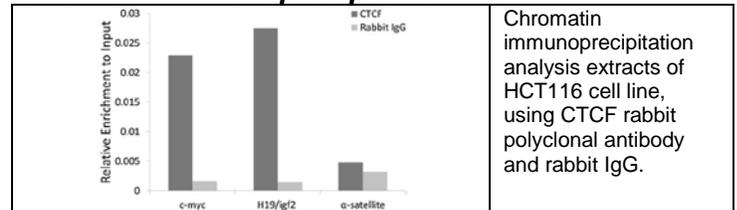
### Immunohistochemistry



### Immunohistochemistry



### Chromatin immunoprecipitation



## Storage

This antibody is shipped at 4 °C. This product is stable for 12 months from date of receipt when stored at -20 °C to -70 °C. Avoid freeze/thaw cycles.

## Hazard/Biohazard

This antibody contains 0.02% sodium azide as preservative. Please handle and dispose the product properly. No known biohazard is associated with this product.