

For Research Use Only

CTCF Polyclonal antibody

Catalog Number: 30428-1-AP



Basic Information

Catalog Number: 30428-1-AP	GenBank Accession Number: BC014267	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 700 µg/ml by Nanodrop;	GeneID (NCBI): 10664	Recommended Dilutions: WB 1:2000-1:16000 IP 0.5-4.0 ug for IP and 0.5-4.0 ug for
Source: Rabbit	Full Name: CCCTC-binding factor (zinc finger protein)	1.0-3.0 mg of total protein lysate for WB IHC 1:400-1:1600
Isotype: IgG	Calculated MW: 83 kDa	
Immunogen Catalog Number: AG32417	Observed MW: 110-150 kDa	

Applications

Tested Applications: IHC, IP, WB, ELISA	Positive Controls: WB : HEK-293 cells, MCF-7 cells, RAW 264.7 cells
Species Specificity: Human, mouse	IP : MCF-7 cells, IHC : mouse lung tissue,

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

Transcriptional insulators are DNA elements that set boundaries on the actions of enhancer and silencer elements and thereby organize the eukaryotic genome into regulatory domains. All vertebrate insulators appear to use the versatile CTCF protein. CTCF uses various combinations of its 11 zinc fingers to recognize a variety of unrelated DNA sequences. Once bound to DNA, CTCF can function as a transcriptional insulator, repressor, or activator, depending on the context of the binding site [PMID:12787766,15454938]. In vertebrates, this 11 zinc-finger protein is shown to be crucial in processes of epigenetic imprinting, X chromosome inactivation, and associated with various complex human diseases including cancer and diabetes [PMID:23139640]. The calculated molecular weight of CTCF is 83 kDa, but stimulation of human corneal epithelial cells with hypoxic stress suppressed a high molecular mass form of CTCF (150 kDa), but not a lower molecular weight form of CTCF (130 kDa) [PMID: 22354964], and there are multiple isoforms of CTCF with molecular masses of 55, 70, 73, 80, 97, and 130 kDa have been observed (PMID: 12878173).

Storage

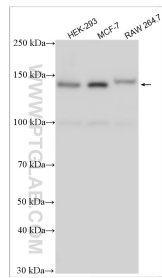
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

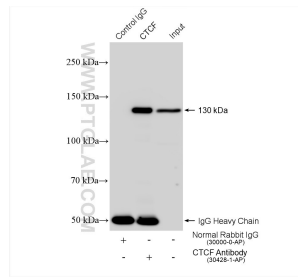
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

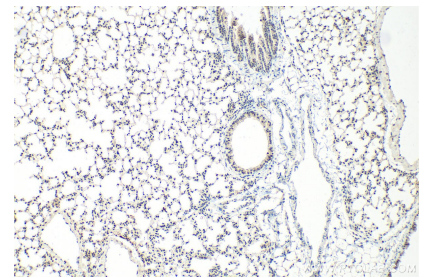
Selected Validation Data



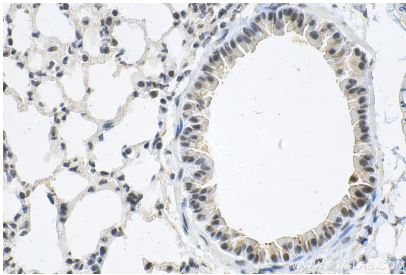
Various lysates were subjected to SDS PAGE followed by western blot with 30428-1-AP (CTCF antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



IP result of anti-CTCF (IP:30428-1-AP, 4 μ g; Detection:30428-1-AP 1:8000) with MCF-7 cells lysate 1880 μ g.



Immunohistochemical analysis of paraffin-embedded mouse lung tissue slide using 30428-1-AP (CTCF antibody) at dilution of 1:800 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse lung tissue slide using 30428-1-AP (CTCF antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).