

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CTCF in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human CTCF Met1-Ile154 Accession # P49711
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

CTCF (CCCTC-binding factor) is a 130-140 kDa member of the CTCF Zn-finger protein family. Although its predicted MW is 83 kDa, it runs anomalously slow in SDS-PAGE. CTCF is ubiquitously expressed, save for primary spermatocytes, and serves multiple functions. It regulates both gene activation and repression by binding to unmethylated DNA sequences. Structurally, it contains eleven Zn-finger motifs, some or all of which may be involved in DNA binding. This variation in number allows for different conformations and multiple interaction partners. Human CTCF is 727 amino acids (aa) in length. It contains two SUMOylation sites (Lys74 and Lys689) and eleven consecutive C2H2-type Zn-finger domains (aa 266-577). There are multiple Ser/Thr phosphorylation sites. Two potential alternative start sites exist; one nine aa upstream of the standard start site, and another at Met570. A third splice variant shows a 62 aa substitution for aa 349-727. Over aa 1-154, human CTCF shares 99% aa identity with mouse CTCF.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.