

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 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 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

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