

#### DESCRIPTION

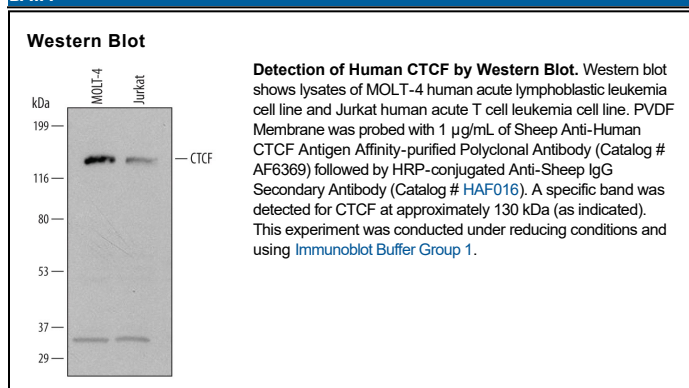
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human CTCF in Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human CTCF Met1-Ile154 Accession # P49711
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

#### 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	1 µg/mL	See Below

#### DATA



#### PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

#### 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.