

**DESCRIPTION**

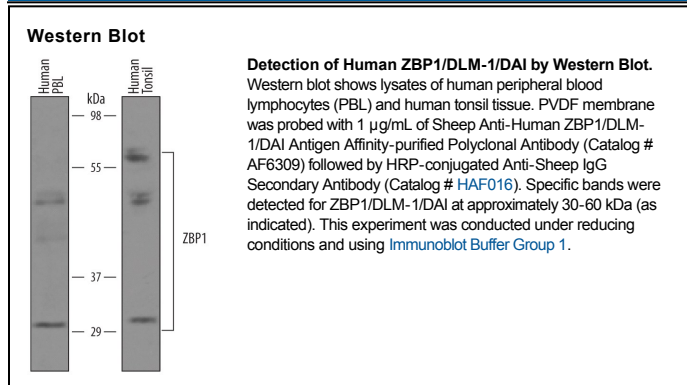
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human ZBP1/DLM-1/DAI in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human ZBP1/DLM-1/DAI Ala2-Ile429 Accession # Q9H171
<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 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>	Sterile PBS to a final concentration of 0.2 mg/mL.
<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**

ZBP1 (Z-DNA binding protein 1; also DAI and DLM-1) is a 15-60 kDa cytosolic detector of intracellular DNA. In a TOLL-independent manner, ZBP1 detects cytoplasmic dsDNA and initiates INF-β production. It does so by binding DNA, followed by multimerization and recruitment of TBK1 and IRF3. This is accompanied by a parallel interaction with RIP-1 and -3 that stimulates NFκB activity and cytokine production. Human ZBP1 is 429 amino acids (aa) in length. It contains two DNA-binding Z-regions (aa 6-72 and 103-168) plus a third DNA-binding region that likely lies in the region between aa 170-250. Multiple splice forms exist. One shows a deletion of aa 12-86, a second shows a 63 aa substitution for aa 87-429, a third contains a 24 aa substitution for aa 225-429, a fourth reveals a deletion of aa 87-109, while a fifth and sixth show 82 and 16 aa substitutions for aa 365-429, respectively. Full length human ZBP1 shares only 47% aa identity with mouse ZBP1.