

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human and mouse CD30 Ligand in direct ELISAs and Western blots. In direct ELISAs, less than 10% cross-reactivity with recombinant human (rh) CD27 Ligand is observed and less than 1% cross-reactivity with rhCD40 Ligand is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human CD30 Ligand Gln63-Asp234 Accession # P32971
<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.

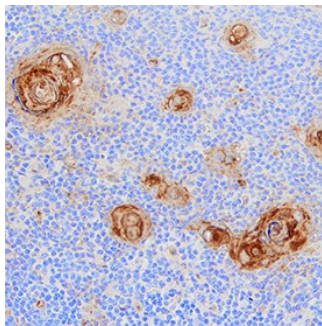
## APPLICATIONS

**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.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.1 µg/mL	Recombinant Human CD30 Ligand/TNFSF8 (Catalog # 1028-CL) and Recombinant Mouse CD30 Ligand/TNFSF8 (Catalog # 732-CL)
<b>Flow Cytometry</b>	0.25 µg/10 <sup>6</sup> cells	Human peripheral blood mononuclear cells activated with PMA and Ca <sup>2+</sup> ionomycin
<b>Immunohistochemistry</b>	0.1-15 µg/mL	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

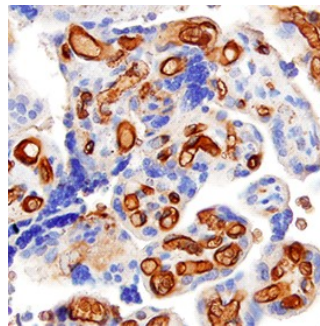
## DATA

### Immunohistochemistry



**CD30 Ligand/TNFSF8 in Human Thymus.** CD30 Ligand/TNFSF8 was detected in immersion fixed paraffin-embedded sections of human thymus using Goat Anti-Human CD30 Ligand/TNFSF8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1028) at 0.3 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Goat IgG VisUCy<sup>™</sup> HRP Polymer Antibody (Catalog # VC004). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to Hassall's corpuscles. View our protocol for [IHC Staining with VisUCy<sup>™</sup> HRP Polymer Detection Reagents](#).

### Immunohistochemistry



**CD30 Ligand/TNFSF8 in Human Placenta.** CD30 Ligand/TNFSF8 was detected in immersion fixed paraffin-embedded sections of human placenta using Goat Anti-Human CD30 Ligand/TNFSF8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1028) at 0.1 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Goat IgG VisUCy<sup>™</sup> HRP Polymer Antibody (Catalog # VC004). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to endothelial cells in villi. View our protocol for [IHC Staining with VisUCy<sup>™</sup> HRP Polymer Detection Reagents](#).

## 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

CD30 ligand (CD30L)/TNFSF8 is a type II membrane protein belonging to the TNF superfamily. CD30L is expressed on the cell surface of activated T cells, B cells, and monocytes. The protein is also constitutively expressed on granulocytes and medullary thymic epithelial cells. The specific receptor for CD30L is CD30/TNFRSF8, a type I transmembrane glycoprotein belonging to the TNF receptor superfamily. CD30 was originally identified as a cell surface antigen of Hodgkin's and Reed-Sternberg cells using the monoclonal antibody Ki-1. CD30 is also expressed on different non-Hodgkin's lymphomas, virus-infected T and B cells, and on normal T and B cells after activation. Among T cells, CD30 is preferentially expressed on a subset of T cells producing Th2-type cytokines and on CD4<sup>+</sup>/CD8<sup>+</sup> thymocytes that coexpress CD45RO and IL-4 receptor. CD30 ligation by CD30L mediates pleiotropic effects including cell proliferation, activation, differentiation and cell death by apoptosis. CD30 can act as a costimulatory molecule in thymic negative selection and may also play a critical role in the pathophysiology of Hodgkin's disease and other CD30<sup>+</sup> lymphomas. Human and mouse CD30 ligand cDNAs share 70% sequence homology.

### References:

1. Brunangelo, F. *et al.* (1995) *Blood* **85**:1.
2. Gruss, H-J. and F. Herrmann (1996) *Leukemia and Lymphoma* **20**:397.
3. Chiarle, R. *et al.* (1999) *J. Immunol.* **163**:194.