

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CD30 Ligand in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human CD30 Ligand Gln63-Asp234 Accession # P32971
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

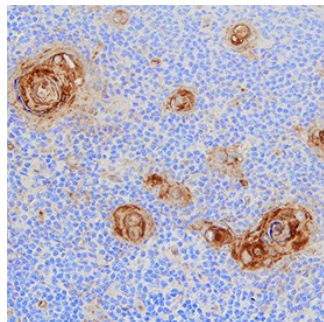
APPLICATIONS

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

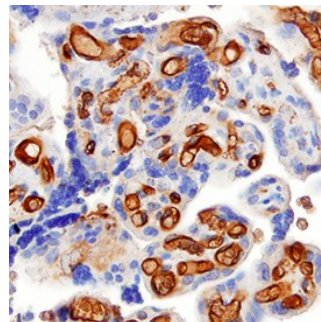
DATA

Immunohistochemistry



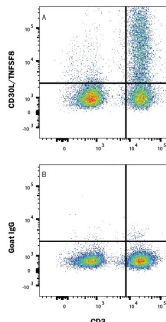
CD30 Ligand/TNFSF8 in Human Thymus. CD30 Ligand/TNFSF8 was detected in immersion fixed paraffin-embedded sections of human thymus using Goat Anti-Human CD30 Ligand/TNFSF8 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1028) at 0.3 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Goat IgG VisUCyte™ 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 VisUCyte 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 VisUCyte™ 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 VisUCyte HRP Polymer Detection Reagents.

Flow Cytometry



Detection of CD30 Ligand/TNFSF8 in Human PBMC by Flow Cytometry. Human PBMC activated with PMA (50 ng/ml) and Ca²⁺ Ionomycin (200 ng/ml) for 16 hours were stained with (A) Goat Anti-Human CD30 Ligand/TNFSF8 Antigen Affinity-Purified Antibody (Catalog # AF1028) or (B) control antibody (Catalog # AB-108-C) followed by Phycoerythrin-conjugated Anti-Goat IgG Secondary Antibody (Catalog # F0107) and Mouse anti-Human CD3 APC-conjugated Monoclonal Antibody (Catalog # FAB100A). Staining was performed using our Staining Membrane-associated Proteins protocol.

PREPARATION AND STORAGE

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

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⁺/CD8⁺ 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⁺ 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.