

DESCRIPTION

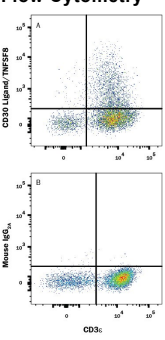
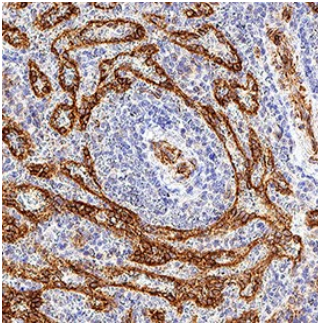
Species Reactivity	Human
Specificity	Detects human CD30 ligand/TNFSF8 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 116621
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived human CD30 Ligand/TNFSF8. Gln63-Asp234 Accession # P32971
Formulation	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
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
Immunohistochemistry	5-25 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

<p>Flow Cytometry</p>  <p>Detection of CD30 Ligand/TNFSF8 in Human PBMCs by Flow Cytometry. Human peripheral blood mononuclear cells (PBMCs) treated with Cell Activation Cocktail 500x (Catalog # 5476) overnight were stained with (A) Mouse Anti-Human CD30 Ligand/TNFSF8 Monoclonal Antibody (Catalog # MAB10281) or (B) Mouse IgG2a isotype control antibody (Catalog # MAB003) followed by Anti-Mouse IgG PE-conjugated Secondary Antibody (Catalog # F0102B) and Mouse anti-Human CD3 APC-conjugated Monoclonal Antibody (Catalog # FAB100A). View our protocol for Staining Membrane-associated Proteins.</p>	<p>Immunohistochemistry</p>  <p>CD30 Ligand/TNFSF8 in Human Spleen. CD30 Ligand/TNFSF8 was detected in immersion fixed paraffin-embedded sections of human spleen using Mouse Anti-Human CD30 Ligand/TNFSF8 Monoclonal Antibody (Catalog # MAB10281) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cell surface. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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 co-express 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 co-stimulatory 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. Dockett, C.S. *et al.* (1997) *Mol. Cell. Biol.* **17**:1535.
3. Chiarle, R. *et al.* (1999) *J. Immunol.* **163**:194.