**Species Reactivity**  
Human

**Specificity**  
Detects human CD30 Ligand/TNFSF8 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) CD27 Ligand, recombinant mouse CD30 Ligand, or rhCD40 Ligand is observed.

**Source**  
Monoclonal Mouse IgG2B Clone # 116614

**Purification**  
Protein A or G purified from hybridoma culture supernatant

**Immunogen**  
Mouse myeloma cell line NSO-derived recombinant human CD30 Ligand/TNFSF8 Gln63-Asp234  
Accession # P32971

**Endotoxin Level**  
<0.10 EU per 1μg of the antibody by the LAL method.

**Formulation**  
Lyophilized from a 0.2μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

*Small pack size (SP) is supplied either lyophilized or as a 0.2μm 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**  

<table>
<thead>
<tr>
<th>Application</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry</td>
<td>0.25µg/10^6 cells See Below</td>
</tr>
<tr>
<td>CyTOF-ready</td>
<td>Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.</td>
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<tr>
<td>Neutralization</td>
<td>Measured by its ability to neutralize CD30 Ligand/TNFSF8 induced IL-6 secretion in the HDLM human Hodgkin's lymphoma cell line. The Neutralization Dose (ND50) is typically 1-4 µg/mL in the presence of 1 µg/mL Recombinant Human CD30 Ligand/TNFSF8 and 10 µg/mL of a cross-linking antibody, Mouse polyHistidine Monoclonal Antibody.</td>
</tr>
</tbody>
</table>

**DATA**

**Flow Cytometry**  
Detection of CD30 Ligand/TNFSF8 in Human PBMCs by Flow Cytometry. Human peripheral blood mononuclear cells (PBMCs) treated with 50 ng/mL PMA and 200 ng/mL Calcium ionomycin overnight were stained with Mouse Anti-Human CD3ε APC-conjugated Monoclonal Antibody (Catalog # FAB100A) and either (A) Mouse Anti-Human CD30 Ligand/TNFSF8 Monoclonal Antibody (Catalog # MAB1028) or (B) Mouse IgG2B Isotype Control (Catalog # MAB004) followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). View our protocol for Staining Membrane-associated Proteins.

**Neutralization**  
IL-6 Secretion Induced by CD30 Ligand/TNFSF8 and Neutralization by Human CD30 Ligand/TNFSF8 Antibody. In the presence of a cross-linking antibody, Mouse polyHistidine Monoclonal Antibody (10 µg/mL, Catalog # MAB050), Recombinant Human CD30 Ligand/TNFSF8 (Catalog # 1028-CL) stimulates IL-6 secretion in the HDLM human Hodgkin's lymphoma cell line in a dose-dependent manner (orange line), as measured by the Human IL-6 Quantikine ELISA Kit (Catalog # D6050). Under these conditions, IL-6 secretion elicited by Recombinant Human CD30 Ligand/TNFSF8 (1 µg/mL) is neutralized (green line) by increasing concentrations of Mouse Anti-Human CD30 Ligand/TNFSF8 Monoclonal Antibody (Catalog # MAB1028). The ND50 is typically 1-4 µg/mL.

**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.  
- 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.
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: