

**DESCRIPTION**

<b>Source</b>	Mouse myeloma cell line, NS0-derived mouse CD30 Ligand/TNFSF8 protein			
	MHHHHHHHHHHH	GGGSGGGSGGGS	IEGR	Mouse CD30 Ligand (Gln68-Asp239) Accession # P32972
	N-terminus			C-terminus
<b>N-terminal Sequence Analysis</b>	Met			
<b>Predicted Molecular Mass</b>	22 kDa			

**SPECIFICATIONS**

<b>SDS-PAGE</b>	30-45 kDa, reducing conditions
<b>Activity</b>	Measured by its ability to stimulate IL-6 secretion by HDLM human Hodgkin's lymphoma cells. Duckett, C.S. <i>et al.</i> (1997) Mol. Cell. Biol. <b>17</b> :1535. The ED <sub>50</sub> for this effect is 5-30 ng/mL in the presence of 10 µg/mL of a cross-linking antibody, Mouse Anti-polyHistidine Monoclonal Antibody (Catalog # MAB050).
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 100 µg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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>• 3 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.

**References:**

1. Brunangelo, F. *et al.* (1995) Blood **85**:1.
2. Duckett, C.S. *et al.* (1997) Mol. Cell. Biol. **17**:1535.
3. Chiarle, R. *et al.* (1999) J. Immunol. **163**:194.