

Product Information

Anti-CD30 Ligand

Developed in Goat
Affinity Isolated Antibody

Product Number **C 5612**

Product Description

Anti-Mouse CD30 Ligand (CD30L) is developed in goat using purified recombinant mouse CD30 ligand (amino acids 68-239) extracellular domain expressed in mouse myeloma NSO cells as immunogen. CD30 ligand specific IgG is purified from goat serum using mouse CD30 ligand affinity chromatography.

Anti-Mouse CD30 Ligand recognizes recombinant mouse CD30 ligand by immunoblotting and ELISA. In immunoblotting and ELISA, this antibody demonstrates approximately 5% cross-reactivity with recombinant human CD30 ligand.

CD30 Ligand (CD30L) is a type II membrane protein of the tumor necrosis factor (TNF) superfamily. It is expressed on the cell surface of activated T cells, B cells, and monocytes.¹ CD30L is also constitutively expressed on granulocytes and medullary thymic epithelial cells. Recombinant mature mouse CD30L (199 amino acids) has a calculated molecular mass of approximately 22 kDa. Due to glycosylation, the recombinant protein migrates to approximately 30-45 kDa in SDS-PAGE under non-reducing and reducing conditions. Human and mouse CD30 ligand share approximately 70% sequence homology.

The specific receptor for CD30L is CD30, 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 monoclonal antibody Ki-1. The binding of CD30L to CD30 mediates pleiotropic effects including cell proliferation, activation, differentiation, and apoptotic cell death. CD30 has a critical role in the pathophysiology of Hodgkin's disease and other CD30⁺ lymphomas and acts as a costimulatory molecule in thymic negative selection.²

Reagent

Anti-Mouse CD30 Ligand is supplied as approximately 100 µg of antibody lyophilized from a 0.2 µm filtered solution in phosphate buffered saline.

Preparation Instructions

To one vial of lyophilized powder, add 1 ml of 0.2 µm-filtered solution of phosphate-buffered saline (PBS) to produce a 0.1 mg/ml stock solution of antibody. If aseptic technique is used, no further filtration should be needed for use in cell culture.

Storage/Stability

Prior to reconstitution, store at -20 °C. The reconstituted product may be stored at 2-8 °C for up to one month. For prolonged storage, freeze in working aliquots. Avoid repeated freezing and thawing. Do not store in a frost-free freezer.

Product Profile

For ELISAs, a working antibody concentration of 0.5-1.0 µg/ml is recommended. The detection limit for recombinant mouse CD30 ligand is approximately 0.5 ng/well.

For immunoblotting, a working antibody concentration of 0.1-0.2 µg/ml is recommended. The detection limit for recombinant mouse CD30 ligand is 5 ng/lane under non-reducing and reducing conditions.

Note: In order to obtain the best results in various techniques and preparations, we recommend determining optimal working dilutions by titration.

Endotoxin: <10 ng/mg antibody determined by the LAL method.

References

1. Gruss, H.J., et al., CD30 ligand expression in nonmalignant and Hodgkin's disease-involved lymphoid tissues. *Am. J. Pathol.*, **149**, 469-481 (1996).
2. Chiarle, R., et al., CD30 overexpression enhances negative selection in the thymus and mediates programmed cell death via a Bcl-2-sensitive pathway. *J. Immunol.* **163**, 194-205 (1999).

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