Recombinant Mouse CD30 Ligand/TNFSF8

Catalog Number: 732-CL

DESCRIPTION

Source

Mouse myeloma cell line, NS0-derived mouse CD30 Ligand/TNFSF8 protein

N-terminal Sequence Analysis: Met

Predicted Molecular Mass: 22 kDa

SPECIFICATIONS

SDS-PAGE: 30-45 kDa, reducing conditions

Activity: Measured by its ability to stimulate IL-6 secretion by HDLM human Hodgkin's lymphoma cells. Duckett, C.S. *et al.* (1997) Mol. Cell. Biol. **17**:1535.
The ED_{50} 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).

Endotoxin Level: <0.10 EU per 1 µg of the protein by the LAL method.

Purity: >95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.

Formulation: Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution: Reconstitute at 100 µg/mL in sterile PBS containing at least 0.1% human or bovine serum albumin.

Shipping: The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

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.
- 3 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.

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.

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