Human CD30 Ligand/TNFSF8 Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF1028

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human and mouse CD30 Ligand in direct ELISAs and Western blots. In direct ELISAs, less than 10% cross-reactivity with recombinant human (rh) CD27 Ligand is observed and less than 1% cross-reactivity with rhCD40 Ligand is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human CD30 Ligand Gln63-Asp234 Accession # P32971
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

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
Western Blot	0.1 µg/mL	Recombinant Human CD30 Ligand/TNFSF8 (Catalog # 1028-CL) and Recombinant Mouse CD30 Ligand/TNFSF8 (Catalog # 732-CL)
Flow Cytometry	2.5 µg/10^6 cells	Human peripheral blood mononuclear cells activated with PMA and Ca^{2+} ionomycin

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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. ● 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 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:

1. Brunangelo, F. *et al.* (1995) Blood **85**:1.
2. Gruss, H-J. and F. Herrmann (1996) Leukemia and Lymphoma **20**:397.
3. Chiarle, R. *et al.* (1999) J. Immunol. **163**:194.