

DESCRIPTION

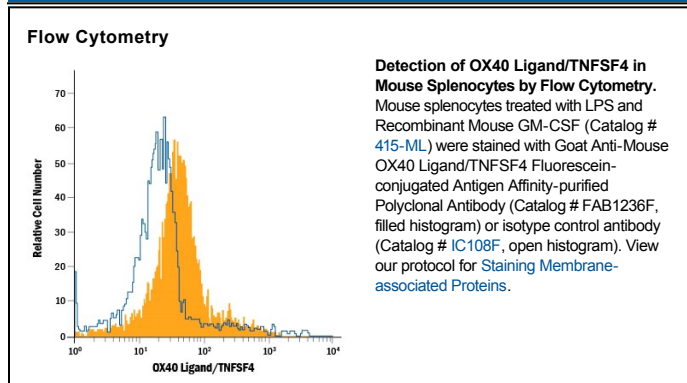
Species Reactivity	Mouse
Specificity	Detects mouse OX40 Ligand/TNFSF4 in direct ELISAs and Western blots. In Western blots, approximately 5% cross-reactivity with recombinant human (rh) OX40 Ligand, rhLIGHT, recombinant mouse (rm) Fas Ligand and less than 1% cross-reactivity with rmTNF- α , rhGITR Ligand, rhTRANCE, and rhVEGI is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse OX40 Ligand/TNFSF4 Gln49-Leu198 Accession # P43488
Conjugate	Fluorescein Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm (FITC)
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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
Flow Cytometry	10 μ L/10 ⁶ cells	See Below

DATA



PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

OX40 Ligand (OX40L), also known as gp34, is a type II transmembrane glycoprotein belonging to the TNF superfamily. Murine OX40L cDNA encodes a 198 amino acid (aa) residue protein comprised of a 28 aa N-terminal cytoplasmic domain, a 20 aa transmembrane segment, and a 150 aa C-terminal extracellular domain (1). Human and murine OX40L share 46% sequence identity at the amino acid level (1). The OX40L is expressed on activated antigen presenting cells such as B cells, macrophages, dendritic cells, and on endothelial cells at the site of inflammation. The receptor for OX40L is OX40 (CD134) that is expressed predominantly on activated CD4⁺ T cells. Expression of OX40 is transient following engagement of T cell receptors (2). Ligation of OX40L by OX40 stimulates proliferation and differentiation of activated B cells, and increases immunoglobulin secretion (3, 4). The expression of OX40L on B cells is up-regulated by CD40 ligation (3). Engagement of the OX40-OX40L system has co-stimulatory effects on T cells by stimulating the production of cytokines by T helper cells and increasing the survival of memory T cells (2, 5). Blocking of the OX40-OX40L interaction *in vitro* inhibits co-stimulation resulting in decreased T cell proliferation and adhesion of T cells to endothelial cells. Inhibition of the OX40-OX40L interaction in disease models has beneficial effects in acute graft-versus-host disease, inflammatory bowel disease, and decreases the development of collagen-induced arthritis and experimental leishmaniasis (6).

References:

1. Baum, P.R. *et al.* (1994) EMBO J. **13**:3992.
2. Gramaglia, I. *et al.* (1999) J. Immunol. **161**:6510.
3. Stuber, E. *et al.* (1995) Immunity **2**:507.
4. Malstrom, V. *et al.* (2001) J. Immunol. **166**:6972.
5. Maxwell, J.R. *et al.* (2000) J. Immunol. **164**:107.
6. Weinberg, A.D. (2002) Trends Immunol. **23**:102.