

Human OX40 Ligand/TNFSF4 Alexa Fluor® 750-conjugated Antibody

Monoclonal Mouse IgG₁ Clone # 159403

Catalog Number: FAB10541S

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human OX40 Ligand in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) APRIL, rhBAFF, rhCD27 Ligand, recombinant mouse (rm) CD27 Ligand, rhCD30 Ligand, rmCD30 Ligand, rhCD40 Ligand, rmEDA, rhFas Ligand, rmFas Ligand, rhGITR Ligand, recombinant cotton rat TNF-α, rhTNF-α, rmTNF-α, recombinant porcine TNF-α, recombinant rat TNF-α, rhTRAIL, rhTRANCE, rmTRANCE, or rhVEGF is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 159403
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human OX40 Ligand Gln51-Leu183 Accession # P23510
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
Formulation	Supplied 0.2 mg/mL 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	0.25-1 µg/10 ⁶ cells	Human mature dendritic cells differentiated from human peripheral blood mononuclear cell derived CD14 ⁺ cells treated with Recombinant Human IL-4 (Catalog # 204-IL), Recombinant Human GM-CSF (Catalog # 215-GM), LPS, Recombinant Human TNF-α (Catalog # 210-TA), and Recombinant Human IL-1β/IL-1F2 (Catalog # 201-LB)

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. ● 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 designated TNFSF4 within the TNF superfamily. Human OX40L cDNA encodes a 183 amino acids (aa) polypeptide with an amino-terminal cytoplasmic domain (aa 1-23) and a carboxy-terminal extracellular domain (aa 51-183). It shares 46% aa sequence identity with the mouse counterpart. OX40L is expressed on the surface of activated B cells, T cells, dendritic cells and endothelial cells. Like other TNF superfamily members, membrane-bound OX40 Ligand exists as a homotrimer. OX40L binds to OX40 (CD134), a member of the TNF receptor superfamily that is expressed predominantly on activated CD4⁺ T cells. OX40 Ligand is one of the group of co-stimulatory molecules in the immune system that includes B7, CD40 Ligand, CD30 Ligand, CD27 Ligand and 4-1BB Ligand. OX40 appears as a late activation-induced T cell surface antigen, and its major function of OX40-OX40L interaction may be to transmit a late co-stimulatory signal to promote the survival and proliferation of activated CD4⁺ T cells and prolong the immune response. Engagement of OX40 on activated T cells *in situ* in tumors has been shown to augment immune responses and subsequent tumor regression.

References:

- Godfrey, W.R. *et al.* (1994) J. Exp. Med. **180**:757.
- Baum, P.R. *et al.* (1994) EMBO J. **13**:3992.
- Al-Shamkhani, A. *et al.* (1997) J. Biol. Chem. **272**:5275.
- Kjaergaard, J. *et al.* (2000) Cancer Res. **60**:5514.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.