PRODUCT INFORMATION

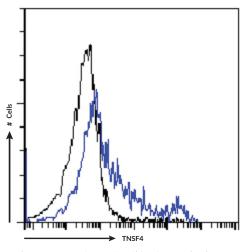


TNFSF4 Chimeric Monoclonal Antibody (Clone R4930 (Oxelumab)) Item No. 37172

Overview and Properties

Contents: Synonyms:	This vial contains 200 μg of protein A-affinity purified monoclonal antibody. CD134L, CD252, Glycoprotein Gp34, OX40 Ligand, OX40L, TAX Transcriptionally Activated Glycoprotein 1, Tumor Necrosis Factor Ligand Superfamily Member 4, TXGP1
Immunogen:	Recombinant human TNFSF4 and human TNSF4-expressing cells
Cross Reactivity:	(+) TNFSF4
Species Reactivity	: (+) Human
Uniprot No.:	P23510
Form:	Liquid
Storage:	-20°C (as supplied)
Stability:	≥1 year
Storage Buffer:	PBS with 0.02% ProClin™ 300
Clone:	R4930 (Oxelumab)
Host:	Chimeric monoclonal antibody
Isotype:	lgG1к
Application:	Flow cytometry (FC); block; the optimal working concentration/dilution should be determined empirically.

Image



Flow-cytometry using TNFSF4 Chimeric Monoclonal Antibody (Clone R4930 (Oxelumab)). Human peripheral blood leukocytes were fixed using 2% PFA, permeabilized using 0.5% Triton, and stained with unimmunized rabbit IgG antibody (MOPC-21; isotype control, black line) or the rabbit IgG-chimeric version of R4930 (blue line) at a dilution of 1:100 for one hour at RT. After washing, bound antibody was detected using a goat anti-rabbit IgG AlexaFluor® 488 antibody at a dilution of 1:1000 and cells analyzed using a FACSCanto[™] flow-cytometer.

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 02/14/2024

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM

PRODUCT INFORMATION



Description

TNF ligand superfamily member 4 (TNFSF4), also known as OX40L, is a type II transmembrane protein and the cognate ligand of the T cell co-stimulatory TNF receptor TNFRSF4, also known as OX40.^{1,2} TNFSF4 assembles into trimers, with each monomer possessing an approximately 132-amino acid extracellular domain composed of a TNF homology domain followed by a C-terminal extension. It is upregulated in antigen-presenting cells, including B cells, macrophages, and dendritic cells, in response to antigen presentation, and is also expressed in mast cells, activated T cells, and certain endothelial cells.² Binding of a TNFSF4 trimer to three TNFRSF4 monomers promotes T cell survival and memory, as well as an effector T cell phenotype, enhances cell mobility, and increases the production of effector cytokines. Polymorphisms in *TNFSF4* are associated with susceptibility to systemic lupus erythematosus (SLE) and systemic sclerosis.^{3,4} Cayman's TNFSF4 Chimeric Monoclonal Antibody (Clone R4930 (Oxelumab)) was recombinantly generated based on the sequence of the original humanized anti-TNFSF4 antibody and can be used for flow cytometry (FC). The humanized anti-TNFSF4 antibody was generated by immunizing HCo12 human IgG transgenic mice with alternating administration of recombinant human TNFSF4 and human TNSF4-expressing cells.⁵⁻⁷

References

- 1. Compaan, D.M. and Hymowitz, S.G. The crystal structure of the costimulatory OX40-OX40L complex. *Structure* **14(8)**, 1321-1330 (2006).
- 2. Webb, G.J., Hirschfield, G.M., and Lane, P.J.L. OX40, OX40L and autoimmunity: A comprehensive review. *Clin. Rev. Allergy Immunol.* **50(3)**, 312-332 (2016).
- 3. Lee, Y.H. and Song, G.G. Associations between TNFSF4 and TRAF1-C5 gene polymorphisms and systemic lupus erythematosus: A meta-analysis. *Hum. Immunol.* **73(10)**, 1050-1054 (2012).
- Gourh, P., Arnett, F.C., Tan, F.K., et al. Association of TNFSF4 (OX40L) polymorphisms with susceptibility to systemic sclerosis. Ann. Rheum. Dis. 69(3), 550-555 (2010).
- 5. Seshasayee, D., Lee, W.P., Zhou, M., *et al.* In vivo blockade of OX40 ligand inhibits thymic stromal lymphopoietin driven atopic inflammation. *J. Clin. Invest.* **117(12)**, 3868-3878 (2007).
- Gauvreau, G.M., Boulet, L.-P., Cockroft, D.W., et al. OX40L blockade and allergen-induced airway responses in subjects with mild asthma. Clin. Exp. Allergy 44(1), 29-37 (2014).
- Jodeleit, H., Winkelmann, P., Caesar, J., et al. Head-to-head study of oxelumab and adalimumab in a mouse model of ulcerative colitis based on NOD/Scid IL2Rγnull mice reconstituted with human peripheral blood mononuclear cells. Dis. Model. Mech. 14(1), dmm046995 (2021).

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897 [734] 971-3335 FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.CAYMANCHEM.COM