

Technical Data Sheet

Biotin Rat Anti-Mouse OX40 Ligand (CD252)

Product Information

Material Number:	559798
Alternate Name:	Tnfsf4; OX40 ligand; OX40L; TXGP1; Txgp1l; gp34; Ath-1, Ath1, CD134L
Size:	0.5 mg
Concentration:	0.5 mg/ml
Clone:	RM134L
Immunogen:	Rat NRK-52E cell line transfected with mouse OX-40L gene (Txgp1l)
Isotype:	Rat (SD) IgG2b, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The RM134L antibody reacts with CD252 (OX-40 Ligand, OX-40L), a member of the NGF/TNF superfamily which is present on antigen-presenting cells and activated B lymphocytes. OX-40L interacts with OX-40 Antigen (CD134) found predominantly on activated T cells. This ligand-receptor pair is grouped with pairs such as CD40-CD40L and CD80- or CD86-CD28, which contribute significantly to B-cell/T-cell interaction during the immune response. The OX-40L-OX-40 interaction is reciprocally costimulatory in that both T cells and B cells are activated in cross-linking. Stimulation via OX-40 Antigen increases the proliferative and IL-2 production responses of activated T cells, while stimulation via OX-40L enhances proliferation and Ig secretion by activated B cells. The RM134L mAb stains B cells activated for four days with anti-IgM plus anti-CD40 (Clone HM40-3) antibodies. An increased binding of OX-40-Ig fusion protein to mouse splenic B cells was observed when B cells were treated with lipopolysaccharide (LPS), suggesting that OX-40L expression is augmented in LPS-activated splenic B cells when compared to resting cells, but this observation could not be confirmed with the RM134L mAb. In addition, other studies with OX-40-Ig fusion protein detected OX-40L on CD4+ and CD8+ activated splenic T cells, but OX-40L was not detected on T cells with the RM134L mAb. Similar results have been reported by others. The RM134L mAb inhibits the binding of OX-40-Ig fusion protein to OX-40L transfectants and blocks the costimulatory activity of OX-40L.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with biotin under optimum conditions, and unreacted biotin was removed.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
553987	Biotin Rat IgG2b, κ Isotype Control	0.25 mg	A95-1
554061	PE Streptavidin	0.5 mg	(none)
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)

Product Notices

- Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- An isotype control should be used at the same concentration as the antibody of interest.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
- For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
- Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Akiba H, Oshima H, Takeda K, et al. CD28-independent costimulation of T cells by OX40 ligand and CD70 on activated B cells. *J Immunol.* 1999; 162(12):7058-7066. (Immunogen)

Baum PR, Gayle RB 3rd, Ramsdell F, et al. Molecular characterization of murine and human OX40/OX40 ligand systems: identification of a human OX40 ligand as the HTLV-1-regulated protein gp34. *EMBO J.* 1994; 13(17):3992-4001. (Biology)

Calderhead DM, Buhlmann JE, van den Eertwegh AJ, Claassen E, Noelle RJ, Fell HP. Cloning of mouse OX40: a T cell activation marker that may mediate T-B cell interactions. *J Immunol.* 1993; 151(10):5261-5271. (Biology)

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Godfrey WR, Fagnoni FF, Harara MA, Buck D, Engleman EG. Identification of a human OX-40 ligand, a costimulator of CD4+ T cells with homology to tumor necrosis factor. *J Exp Med*. 1994 August; 180(2):757-762. (Biology)

Stuber E, Neurath M, Calderhead D, Fell HP, Strober W. Cross-linking of OX40 ligand, a member of the TNF/NGF cytokine family, induces proliferation and differentiation in murine splenic B cells. *Immunity*. 1995; 2(5):507-521. (Biology)