Mouse OX40/TNFRSF4 PE-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: FAB1256P
100 TESTS

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse OX40/TNFRSF4 in direct ELISAs and Western blots. In these formats, less than 2% cross-reactivity with recombinant mouse (rm) EDAR, rm4-BB, rmCD27, rmDR3, rmGITR, rmNGF R, rmCD30, rmCD40, rmFas, rmOPG, rmRANK, rmTNF RI, and rmTNF RII is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse OX40/TNFRSF4 Val20-Pro211 Accession # P47741
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
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.

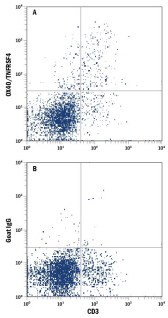
APPLICATIONS

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 µL/10^6 cells	See Below

DATA

Flow Cytometry



Detection of OX40/TNFRSF4 in Mouse Splenocytes by Flow Cytometry. Activated-mouse splenocytes were stained with Rat Anti-Mouse CD3 APC-conjugated Monoclonal Antibody (Catalog # FAB4841A) and either (A) Goat Anti-Mouse OX40/TNFRSF4 PE-conjugated Antigen Affinity-purified Polyclonal Antibody (Catalog # FAB1256P) or (B) Normal Goat IgG Phycoerythrin Control (Catalog # IC108P). View our protocol for Staining Membrane-associated Proteins.

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.

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BACKGROUND

OX40, also known as CD134, was originally identified as an activated rat $CD4^+$ T cell-surface antigen that is recognized by the monoclonal antibody MRC OX40. It is a member of the tumor necrosis factor receptor superfamily (TNFRSF) and has been designated TNFRSF4. Mouse OX40 cDNA encodes a 256 amino acid (aa) residues type I transmembrane precursor protein with a putative 19 aa signal peptide, a 192 aa extracellular domain containing 4 TNFR-cysteine rich repeats, a 25 aa transmembrane domain and a 36 aa cytoplasmic region. A naturally occurring soluble OX40 has also been identified in human serum. Mouse OX40 shares approximately 63% and 90% aa sequence identity with its human and rat counterparts, respectively. OX40 is a T cell activation antigen that is expressed primarily on activated $CD4^+$ T cells, but is also expressed on activated human and mouse $CD8^+$ T cells. The ligand of OX40 is OX40 Ligand (OX40L), also known as gp34, a type II transmembrane glycoprotein belonging to the TNF superfamily. OX40L is expressed on activated B cells, T cells, dendritic cells and endothelial cells. Ligation of OX40 on T cells by OX40L or an agonistic antibody can promote clonal expansion, long-term T cell survival, and enhance memory T cell development. *In vivo,* blockade of OX40/OX40L interaction has been useful for treating autoimmune disease and graft-versus-host disease in animal models. Activation of OX40 has also been utilized to enhance the potency of vaccines and augment anti-tumor immunity (1-9).

References:

1. Paterson, D.J. *et al.* (1987) Mol. Immunol. **24**:1281.
2. Mallett, S. *et al.* (1990) EMBO J. **9**:1063.
3. Calderhead, D.M. *et al.* (1993) J. Immunol. **151**:5261.
4. Baum, P.R. *et al.* (1994) EMBO J. **13**:3992.
5. Gramaglia, I. *et al.* (1998) J. Immunol. **161**:6510.
6. Bansal-Pakala, P. *et al.* (2001) Nature Medicine **7**:907.
7. Rogers, P.R. *et al.* (2001) Immunity **15**:445.
8. Taylor, L. and H.J. Schwarz (2001) Immunol. Methods **255**:67.
9. Weinberg, A.D. (2002) Trends in Immunol. **23**:102.

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