

#15147
Store at +4°C**OX40 (D1S6L) Rabbit mAb (Pacific Blue™ Conjugate)**

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: FC-FP	Reactivity: H	Sensitivity: Endogenous	Source/Isotype: Rabbit IgG	UniProt ID: #P43489	Entrez-Gene Id: 7293
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Product Usage Information**Application**

Flow Cytometry (Fixed/Permeabilized)

Dilution

1:50

Storage

Supplied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. Do not aliquot the antibody. Protect from light. Do not freeze.

Specificity/Sensitivity

OX40 (D1S6L) Rabbit mAb (Pacific Blue™ Conjugate) recognizes endogenous levels of total OX40 protein. This antibody binds the intracellular domain of human OX40 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human OX40 protein.

Description

This Cell Signaling Technology antibody is conjugated to Pacific Blue™ fluorescent dye and tested in-house for direct flow cytometry in human cells. The antibody is expected to exhibit the same species cross-reactivity as the unconjugated antibody OX40 (D1S6L) Rabbit mAb #15123.

Background

OX40 (TNFRSF4, CD134) is a member of the tumor necrosis factor (TNF) receptor superfamily that regulates T cell activity and immune responses. The OX40 protein contains four cysteine rich domains, a transmembrane domain, and a cytoplasmic tail containing a QEE motif (1,2). OX40 is primarily expressed on activated CD4+ and CD8+ T-cells, while the OX40 ligand (OX40L, TNFSF4, CD252) is predominantly expressed on activated antigen presenting cells (3-7). The engagement of OX40 with OX40L leads to the recruitment of TNF receptor-associated factors (TRAFs) and results in the formation of a TCR-independent signaling complex. One component of this complex, PKCθ, activates the NF-κB pathway (2,8). OX40 signaling through Akt can also enhance TCR signaling directly (9). Research studies indicate that the OX40L-OX40 pathway is associated with inflammation and autoimmune diseases (10). Additional research studies show that OX40 agonists augment anti-tumor immunity in several cancer types (11,12).

Background References

1. Croft, M. (2010) *Annu Rev Immunol* 28, 57-78.
2. So, T. and Croft, M. (2012) *Front Immunol* 3, 133.
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5. Dürkop, H. et al. (1995) *Br J Haematol* 91, 927-31.
6. Godfrey, W.R. et al. (1994) *J Exp Med* 180, 757-62.
7. Al-Shamkhani, A. et al. (1997) *J Biol Chem* 272, 5275-82.
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9. So, T. and Croft, M. (2013) *Front Immunol* 4, 139.
10. Gough, M.J. and Weinberg, A.D. (2009) *Adv Exp Med Biol* 647, 94-107.
11. Weinberg, A.D. et al. (2011) *Immunol Rev* 244, 218-31.
12. Linch, S.N. et al. (2015) *Front Oncol* 5, 34.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Applications Key

FC-FP: Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

H: Human

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