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#15133

## OX40 (D4N3K) Rabbit mAb (Alexa Fluor® 488 Conjugate)

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

<b>Applications:</b> FC-L	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #P43489	<b>Entrez-Gene Id:</b> 7293
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### Product Usage Information

#### Application

Flow Cytometry (Live)

#### 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 (D4N3K) Rabbit mAb (Alexa Fluor® 488 Conjugate) recognizes endogenous levels of total OX40 protein. This antibody binds the extracellular domain of human OX40 protein.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gln156 of human OX40 protein.

### Description

This Cell Signaling Technology antibody is conjugated to Alexa Fluor® 488 fluorescent dye and tested in-house for direct flow cytometry analysis in human cells. This antibody is expected to exhibit the same species cross-reactivity as the unconjugated OX40 (D4N3K) Rabbit mAb #15122.

### 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

- Croft, M. (2010) *Annu Rev Immunol* 28, 57-78.
- So, T. and Croft, M. (2012) *Front Immunol* 3, 133.
- Paterson, D.J. et al. (1987) *Mol Immunol* 24, 1281-90.
- Mallett, S. et al. (1990) *EMBO J* 9, 1063-8.
- Dürkop, H. et al. (1995) *Br J Haematol* 91, 927-31.
- Godfrey, W.R. et al. (1994) *J Exp Med* 180, 757-62.
- Al-Shamkhani, A. et al. (1997) *J Biol Chem* 272, 5275-82.
- So, T. et al. (2011) *Proc Natl Acad Sci U S A* 108, 2903-8.
- So, T. and Croft, M. (2013) *Front Immunol* 4, 139.
- Gough, M.J. and Weinberg, A.D. (2009) *Adv Exp Med Biol* 647, 94-107.
- Weinberg, A.D. et al. (2011) *Immunol Rev* 244, 218-31.
- 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-L:** Flow Cytometry (Live)

### Cross-Reactivity Key

**H:** Human

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