

Store at  
-20C  
#61637**OX40 (E9U7O) XP<sup>®</sup> Rabbit mAb**

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

<b>Applications:</b> W, IP, IHC-Bond, IHC-P, IF-IC	<b>Reactivity:</b> H M R	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 35-50	<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**

Western Blotting  
Immunoprecipitation  
IHC Leica Bond  
Immunohistochemistry (Paraffin)  
Immunofluorescence (Immunocytochemistry)

**Dilution**

1:1000  
1:200  
1:400  
1:50  
1:50 - 1:200

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #76367.

**Specificity/Sensitivity**

OX40 (E9U7O) XP<sup>®</sup> Rabbit mAb recognizes endogenous levels of total OX40 protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gln264 of human OX40 protein.

**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.
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- 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.
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- 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).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting **IP:** Immunoprecipitation **IHC-Bond:** IHC Leica Bond **IHC-P:** Immunohistochemistry (Paraffin) **IF-IC:** Immunofluorescence (Immunocytochemistry)

**Cross-Reactivity Key**

**H:** Human **M:** Mouse **R:** Rat

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