

## Anti-CD134 [OX86] Standard Size Ab00110-1.4

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

**Isotype and Format:** Mouse IgG1, Fc Silent<sup>™</sup>, Kappa

**Clone Number: OX86** 

Alternative Name(s) of Target: OX40; OX-40; Tumor necrosis factor receptor superfamily member 4;

OX40 antigen; OX40L receptor; CD134; Tnfrsf4; OX-86 **UniProt Accession Number of Target Protein:** P47741

Published Application(s): agonist, ELISA, FC, IF

**Published Species Reactivity: Mouse** 

**Immunogen:** This antibody was raised against the recombinant mouse OX40 protein.

**Specificity:** This antibody recognises murine OX40 (CD134), a cell surface antigen expressed only by activated T lymphocytes. It is a member of TNFR-superfamily of receptors and acts as a costimulatory molecule involved in long-term T-cell immunity.

Application Notes: OX86 antibody, in its original rat IgG1 format, acts as an OX40 agonist in an Fc-dependent manner and has been widely used in studies investigating the role of OX40 in tumor inhibition (Hirschhorn-Cymerman et al., 2009). Studies comparing two recombinant murine Fc versions (IgG1 and IgG2a) elucidated the importance of the FcR engagement in the antitumor activity of this antibody; the study demonstrated that a stronger murine Fc (in an IgG2a version) was more effective in inducing a CT26 syngeneic tumor regression as well as it led to a stronger Treg depletion in the tumor in comparison with a murine IgG1 version (Metzger et al., 2016). In another study two versions of the OX86 antibody (with a fully functional Fc fragment and with an impaired Fc) and showed that Fc-dependent activity was necessary in inducing systemic antitumor activity (Sagiv-Barfi et al., 2018). FC: This antibody was also used in flow cytometry to stain mouse CD4 and CD8 single-positive cells (al-Shamkhani et al., 1996). FC: Blanquiceth et al. (2016) used this antibody in flow cytometry as well to analyse cells coming from mediastinal lymph nodes and lung tissue. IHC: OX86 antibody was utilised in immunohistochemistry staining of gut tissue (Peyer's patches and lamina propria samples) in order to identify OX40-positive cells in colitic mice (Higgins et al., 1999).

**Antibody First Published in:** al-Shamkhani A, Birkeland ML, Puklavec M, Brown MH, James W, Barclay AN. OX40 is differentially expressed on activated rat and mouse T cells and is the sole receptor for the OX40 ligand. Eur J Immunol. 1996 Aug;26(8):1695-9. PMID:8765008

**Note on publication:** Describes the generation of the antibody, its use in flow cytometry (staining mouse

CD4 and CD8 single-positive cells).

## **Product Form**

Size: 200 µg Purified antibody.

**Purification:** Protein A affinity purified **Supplied In:** PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -

20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.