

## Anti-CD134 [OX86] VivopureX 5 mg Ab00110-2.3-VXM

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

This is a chimeric antibody created to reduce immunogenicity during in vivo applications.

**Isotype and Format:** Mouse IgG2a, Fc Silent™, 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, Puklavek 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:** 5 mg VivopureX products are produced at high purity (>98%), low endotoxin (<0.5 EU/mg) and are formulated without preservatives. These antibodies are chimerized to have an Fc domain matching their target species to reduce immunogenicity and give you the optimal effector function for your experiment. As a result VivopureX products are the ideal choice for in vivo research applications.

**Purification:** Protein A affinity purified

**Supplied In:** PBS only.

**Storage Recommendation:** All VivopureX products are formulated in PBS only without addition of preservatives. To ensure optimal storage and prevent microbial contamination, only open and dispense under sterile conditions. Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

**Concentration:** ≥1mg (see vial label for exact conc)

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