

## Anti-CD134 [OX86] Vivopure 100 mg Ab00110-6.1-VPB

**Isotype and Format:** Rat IgG1, 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:** 100 mg Vivopure products are produced at high purity (>98%), low endotoxin (<0.5 EU/mg) and are formulated without preservatives. As a result Vivopure products are the ideal choice for in vivo research applications.

**Purification:** Protein A affinity purified

**Supplied In:** PBS only, with >98% antibody purity and <1 EU/mg guaranteed.

**Storage Recommendation:** All vivopure 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.