

## Anti-CD134 [OX86] Standard Size Ab00110-1.32

This antibody has a D265A mutation affecting Fc receptor engagement.

This chimeric mouse antibody was made using the variable domain sequences of the original Rat IgG1 format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Mouse IgG1-D265A, Fc Silenced, 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:** 100 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.