Maxpar Anti-Human CD134/OX40 (ACT35)-142Nd

Catalog Number, Package Size: 3142018B, 100 tests
3142018C, 25 tests

Clone: ACT35

Other Names: ACT35 antigen, tumor necrosis factor receptor superfamily member 4 (TNFRSF4)

Isotype: Mouse IgG1, kappa

Reactivity: Human, Chimpanzee

Tag: 142Nd

Formulation: Antibody stabilizer with 0.05% sodium azide

Storage: Store at 2–8 °C. Do not freeze.

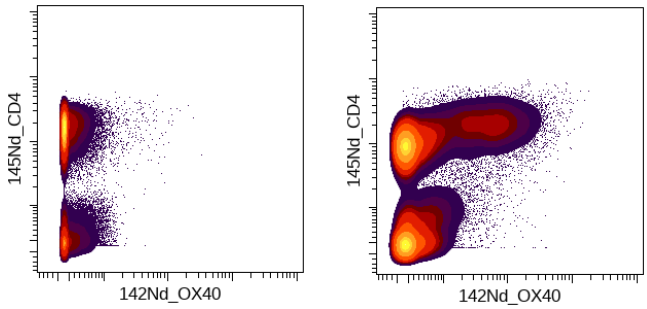
Application: Suspension mass cytometry

Technical Information

Description: CD134, also known as OX40 and TNFRSF14, is a 50 kDa type I transmembrane glycoprotein and a member of the TNF receptor family. OX40 is expressed on activated T lymphocytes including Th1, Th2, Th17, and Treg cells. The interaction of OX40 with OX40L results in B cell proliferation and antibody secretion, regulation of primary T cell expansion, and T cell survival. OX40 influences the size of the T cell memory pool and regulation of CD4+ T cell tolerance.

Application: The metal-tagged antibody is designed and formulated for the application of suspension mass cytometry using the Fluidigm CyTOF® suspension systems on healthy human PBMC.

Validation: Each lot of Maxpar® antibody is quality control-tested by suspension mass cytometry analysis of stained cells using appropriate positive and negative cell staining and/or activation controls.



Three-day rested (left) or PHA-stimulated human PBMC were stained with anti-CD4 (RPA-T4)-145Nd and anti-OX40 (ACT35)-142Nd. Total T cells (CD45+CD20-CD14-CD3+) are shown in the populations.

Recommended use: Use 1 µL for up to 3 x 10^6 live cells in 100 µL staining volume. We recommend titrating the antibody for optimal performance for each of the desired applications. Centrifuge the stock antibody at 12,000 × *g* for 5 min to sediment antibody aggregates.

Fixation is typically used in intracellular staining protocols or in barcoding with the Cell-ID™ 20-Plex Pd Barcoding Kit. However, fixing before antibody staining can affect epitope structure and antibody binding, with the impact varying on the type and concentration of fixative and the protocol used. It is therefore important to perform a small, preliminary antibody staining experiment, with and without fixation, using non-critical samples.

Applicable Protocols

Before using this product, refer to the instructions in the Maxpar Cell Surface Staining with Fresh Fix Protocol (400276).

References

Bandura, D.R. et al. "Mass cytometry: technique for real time single cell multitarget immunoassay based on inductively coupled plasma time-of-flight mass spectrometry." Analytical Chemistry 81 (2009): 6,813–22.

Ornatsky, O.I. et al. "Highly multiparametric analysis by mass cytometry." Journal of Immunological Methods 361 (2010): 1–20.

Lingblom, C.M.D. et al. "Baseline immune profile by CyTOF can predict response to an nvestigational adjuvanted vaccine in elderly adults." Journal of Translational Medicine 16 (2018):153.

Safety

Use standard laboratory safety protocols. Read and understand the safety data sheets (SDSs) before handling chemicals. To obtain SDSs, go to fluidigm.com and search for **3000000X**.