

# Anti-Human CD194/CCR4-149Sm

## Pathologist-Verified Clone for Imaging Mass Cytometry™

Catalog: 3149030D

Package size and concentration: 25 µg, 0.5 mg/mL

Storage: Store at 4 °C. Do not freeze.

Reactivity: Human

Clone: L291H4

Isotype: Mouse IgG1

Formulation: Antibody stabilizer with 0.05% sodium azide

Application: IMC-Paraffin

## Technical Information

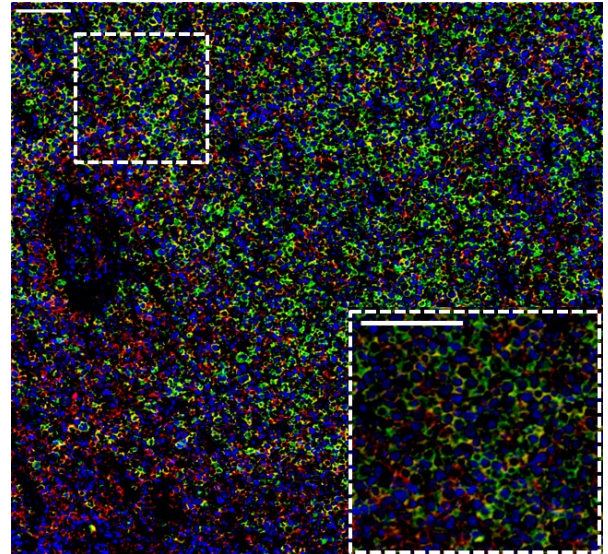
**Application:** The metal-tagged antibody is designed and formulated for the application of Imaging Mass Cytometry (IMC™) using the Fluidigm Hyperion™ Imaging System on formalin-fixed, paraffin-embedded (FFPE) tissue sections.

**Quality control:** Each lot of conjugated antibody is quality control-tested by Imaging Mass Cytometry on tissue sections.

**Recommended concentration:** For optimal performance it is recommended that the antibody be titrated for the desired application. Suggested initial dilution range:  
IMC-Paraffin: 1:25 to 1:100

## Description

CD194, also known as CC chemokine receptor 4 (CCR4), belongs to the G protein-coupled receptor family. It is expressed on stimulated and unstimulated T and B cells, basophils, monocytes and NK cells. Human peripheral blood regulatory T cells (Tregs) can be divided into two distinct populations based on the expression of CCR4. Freshly isolated Tregs express CCR4 and presumably represent memory-type Tregs, and CCR4- Tregs require anti-CD3 antibody-mediated activation to acquire a regulatory activity. Depletion of CCR4+ T cells leads to Th1-type polarization of CD4+ T cells and augmentation of CD8+ T cell responses to tumor antigens.



Human adult T cell lymphoma (FFPE) stained with 149Sm-anti-CD194/CCR4 (L291H4) at a dilution of 1:50 (green pseudocolor), 156Gd-anti-CD4 (EPR6855) (red pseudocolor), and iridium DNA intercalator (blue pseudocolor). Heat-mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. Scale bar size = 100 µm.

## References

Chang, Q. et al. "Staining of frozen and formalin-fixed, paraffin-embedded tissues with metal-labeled antibodies for imaging mass cytometry analysis." *Current Protocols in Cytometry* 82 (2017): 12.47.1–12.47.8.

Giesen, C. et al. "Highly multiplexed imaging of tumor tissues with subcellular resolution by mass cytometry." *Nature Methods* 11 (2014): 417–22.

For technical support visit <http://techsupport.fluidigm.com>. | For general support visit [www.fluidigm.com/support](http://www.fluidigm.com/support).

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