

# Anti-Human CD8 $\alpha$ -162Dy

## Pathologist-Verified Clone for Imaging Mass Cytometry™

Catalog: 3162034D

Package size and concentration: 25  $\mu$ g, 0.5 mg/mL

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

Reactivity: Human

Clone: C8/144B

Isotype: Mouse IgG1

Formulation: Antibody stabilizer with 0.05% sodium azide

Application: IMC-Paraffin

## Technical Information

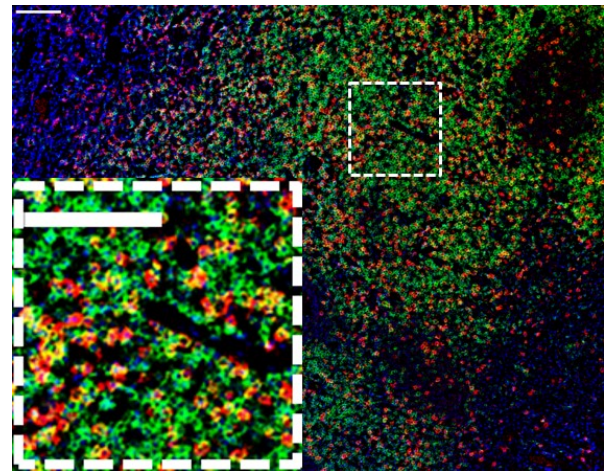
**Application:** The metal-tagged antibody is designed and formulated for the application of Imaging Mass Cytometry (IMC™) using the Fluidigm Hyperion™ Imaging System on formalin-fixed, paraffin-embedded (FFPE) tissue sections.

**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: 1:50 to 1:200

## Description

CD8, also known as T8 and Leu2, is a type I membrane glycoprotein consisting of two disulfide-linked chains (CD8 $\alpha$ , CD8 $\beta$ ). CD8 is a member of the immunoglobulin superfamily found on the majority of thymocytes, a subset of peripheral blood T cells, and NK cells (which express almost exclusively CD8 $\alpha$  homodimers). CD8 acts as a co-receptor with MHC class I-restricted T cell receptors in antigen recognition and T cell activation and has been shown to play a role in thymic differentiation. Two domains in CD8 $\alpha$  are important for function: the extracellular IgSF domain binds the  $\alpha$ 3 domain of MHC class I, and the cytoplasmic CXCP motif binds the tyrosine kinase p56 Lck.



Human tonsil (FFPE) stained with 162Dy-anti-CD8 $\alpha$  (C8/144B) at a dilution of 1:100 (red pseudocolor), 170Er-anti-CD3 (poly) (green pseudocolor), and iridium DNA intercalator (blue pseudocolor). Heat-mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. Scale bar size = 100  $\mu$ m.

## 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.

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