

Anti-SOX9-147Sm

Pathologist-Verified Clone for Imaging Mass Cytometry™

Catalog: 3147022D

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

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

Reactivity: Human, Mouse, Rat

Clone: EPR14335

Isotype: Rabbit IgG

Formulation: Antibody stabilizer with 0.05% sodium azide

Application: IMC-Paraffin

Technical Information

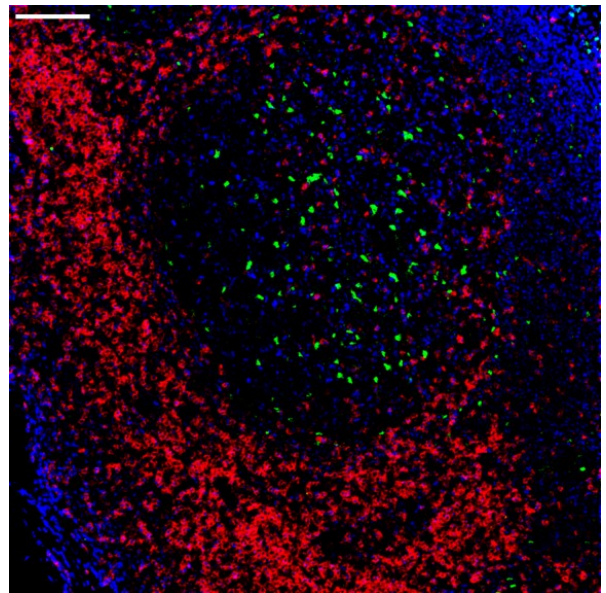
Application: The metal-tagged antibody is designed and formulated for the application of Imaging Mass Cytometry (IMC™) using the Fluidigm Hyperion™ Imaging System on formalin-fixed, paraffin-embedded (FFPE) tissue sections.

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

SOX9 (sex determining region Y-box 9), a transcription factor associated with the testis-determining factor sex determining region Y (SRY), consists of two functional domains: a high-mobility group (HMG) DNA-binding domain and a C-terminal transactivation domain. It is expressed mainly in adult tissues and also in fetal testis and skeletal tissue. SOX9 plays a major role in cartilage differentiation and early testis development. Recent research has shown that SOX9 expression in lung adenocarcinoma induces a mesenchymal phenotype in tumor cells. In addition, SOX9 expression has been linked with several other tumor types including ovarian, prostate and pancreatic malignancies.



Human tonsil (FFPE) stained with 147Sm-anti-SOX9 (EPR14335) at a dilution of 1:50 (green pseudocolor), 170Er-anti-CD3 (poly) (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.

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