Anti-Histone 3 (D1H2)-176Yb

Pathologist-Verified Clone for Imaging Mass Cytometry™

Catalog number: 3176023D
Package size and concentration: 25 µg, 0.5 mg/mL
Clone: D1H2
Isotype: Rabbit IgG
Pathologist-verified on: Human FFPE
Fluidigm tested on: Human FFPE, Mouse FFPE
Reported reactivity: Human, Mouse, Rat, Bovine, Hamster, Monkey
Formulation: Antibody stabilizer with 0.05% sodium azide
Storage: Store at 4 °C. Do not freeze.
Application: IMC paraffin

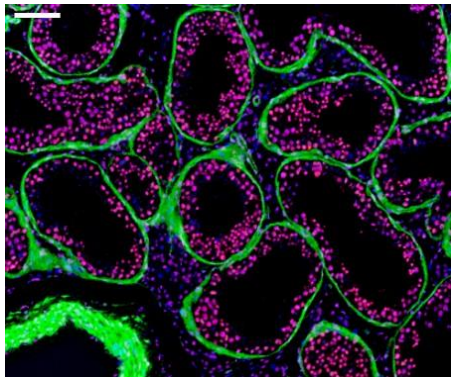
Technical Information

Description: Histone 3 is a 17 kDa nuclear protein that is a component of an octamer containing pairs of each of 4 core histones (H2A, H2B, H3, H4). Histone 3, featuring a main globular domain and a long N-terminal tail, is involved with nucleosome structure of chromosomal fiber in eukaryotes. Histone 3 can be modified by phosphorylation, acetylation, ubiquitination, ribosylation and methylation. The N-terminal tail of histone 3 protrudes from the globular nucleosome core and can undergo several different types of post-translational modification that influence cellular processes.

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 1:600



Human testis (FFPE) stained with 176Yb-anti-histone 3 (D1H2) at a dilution of 1:300 (red pseudocolor), 141Pr-anti-aSMA (1A4) (green 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.

Safety

Use standard laboratory safety protocols. Read and understand the safety data sheets (SDSs) before handling chemicals. To obtain SDSs, go to fluidigm.com/sds and search for the SDS using either the product name or the part number.