

Anti-Pan-Cytokeratin (AE1/AE3)-148Nd

Pathologist-Verified Clone for Imaging Mass Cytometry™

Catalog number: 3148022D

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

Clone: AE-1/AE-3

Isotype: Mouse IgG1

Pathologist-verified on: Human FFPE, Human Frozen

Fluidigm tested on: Human FFPE, Human Frozen, Mouse FFPE

Reported reactivity: Human, Mouse, Dog, Primate, Rat

Formulation: Antibody stabilizer with 0.05% sodium azide

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

Application: IMC paraffin, IMC frozen

Technical Information

Description: AE1/AE3 is a broad-spectrum anti-pan-cytokeratin antibody cocktail that differentiates epithelial tumors from non-epithelial tumors. AE1 immunoreacts with an antigenic determinant present on most of the subfamily A cytokeratins, including cytokeratins with molecular weights of 56.5, 50, 48, and 40 kDa. Antibody AE3 reacts with an antigenic determinant shared by the subfamily B cytokeratins including cytokeratins with molecular weights of 64, 59, 58, 56, and 52 kDa. This antibody stains cytokeratins present in normal and abnormal human tissues and has shown high sensitivity in the recognition of epithelial cells and carcinomas.

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, and frozen 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
 IMC-Frozen: 1:50 to 1:200

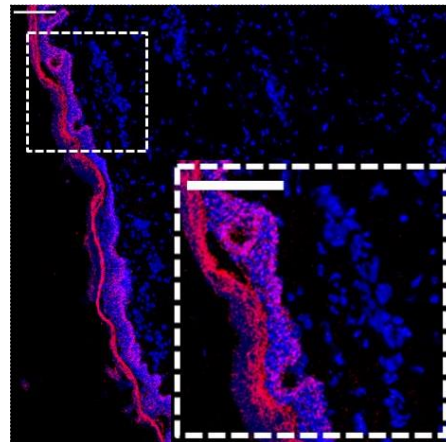
References

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.

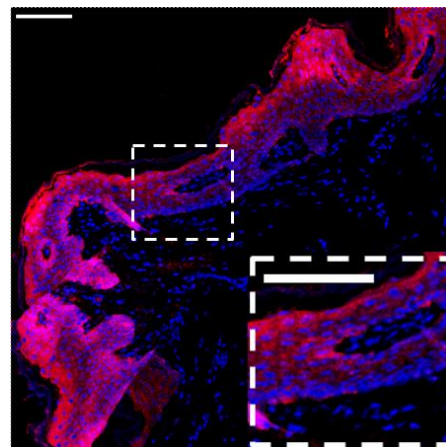
Giesen, C. et al. "Highly multiplexed imaging of tumor tissues with subcellular resolution by mass cytometry." *Nature Methods* 11 (2014): 417–22.

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.



Human frozen skin stained with 148Nd-anti-pan-cytokeratin (AE1/AE3) at a dilution of 1:100 (red pseudocolor) and iridium DNA intercalator (blue pseudocolor). Tissue section was fixed in 4% paraformaldehyde for 30 minutes at 4 °C. Scale bar size = 100 µm.



Human skin (FFPE) stained with 148Nd-anti-pan-cytokeratin (AE1/AE3) at a dilution of 1:200 (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.

For technical support visit techsupport.fluidigm.com. | For general support visit fluidigm.com/support.

For Research Use Only. Not for use in diagnostic procedures.

This product contains antibodies manufactured by and sold under license from BioLegend® and licensees thereof.

Information in this publication is subject to change without notice. **Limited Use Label License:** The purchase of this Fluidigm Instrument and/or Consumable product conveys to the purchaser the limited, nontransferable right to use with only Fluidigm Consumables and/or Instruments respectively except as approved in writing by Fluidigm. **Patent and license information:** fluidigm.com/legal/notices. **Trademarks:** Fluidigm, the Fluidigm logo, Hyperion, Imaging Mass Cytometry, and IMC are trademarks and/or registered trademarks of Fluidigm Corporation in the United States and/or other countries. All other trademarks are the sole property of their respective owners. © 2020 Fluidigm Corporation. All rights reserved. 24-Apr-2020