

# Anti-Human Collagen Type I-169Tm

## Pathologist-Verified Clone for Imaging Mass Cytometry

Catalog: 3169023D

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

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

Reactivity: Human

Clone: Polyclonal

Isotype: Goat Polyclonal

Formulation: Antibody stabilizer with 0.05% sodium azide

Application: IMC paraffin, IMC frozen

## 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) 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: 1:150 to 1:600  
 IMC frozen: 1:200 to 1:800

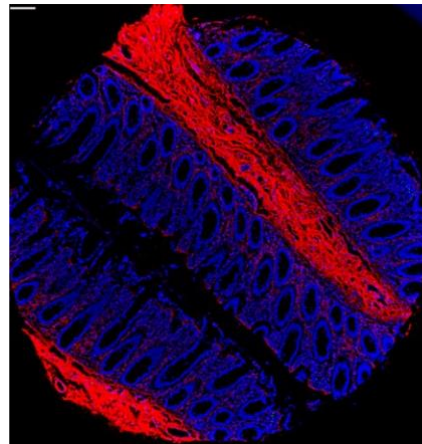
## Description

Collagen Type I is a fibrillar-forming, extracellular matrix protein composed of two alpha 1 chains and one alpha 2 chain in a triple helix. It is the predominant form of collagen in the human body. It forms the fibrils of tendon, ligaments, and bones, and it plays a role in scar tissue formation. Mutations in this gene are associated with osteogenesis imperfecta types I–IV, Ehlers-Danlos syndrome type VIIA, Ehlers-Danlos syndrome classical type, Caffey disease and idiopathic osteoporosis.

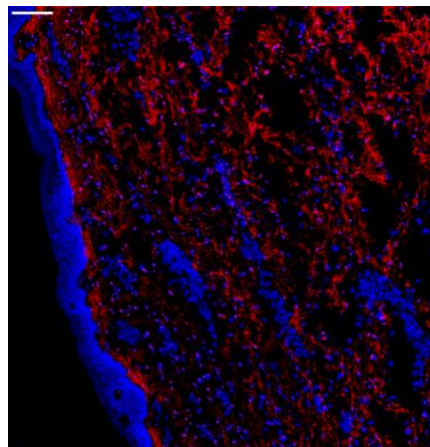
## References

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.



Human normal colon (FFPE) stained with 169Tm- anti-collagen I (poly) at a dilution of 1:300 (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.



Human frozen colon stained with 169Tm-anti-collagen I (poly) at a dilution of 1:500 (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.

**For technical support visit [techsupport.fluidigm.com](https://techsupport.fluidigm.com). | For general support visit [fluidigm.com/support](https://fluidigm.com/support).**

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

Information in this publication is subject to change without notice. **Safety data sheet information:** [fluidigm.com/sds](https://fluidigm.com/sds). **Patent and license information:** [fluidigm.com/legal/notices](https://fluidigm.com/legal/notices). **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. **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. © 2019 Fluidigm Corporation. All rights reserved. 11/2019