

# Anti-Human Alpha-Smooth Muscle Actin-141Pr

## Pathologist-Verified Clone for Imaging Mass Cytometry

Catalog: 3141017D

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

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

Reactivity: Human

Clone: 1A4

Isotype: Mouse IgG2a

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 frozen: 1:50 to 1:200

IMC paraffin: 1:100 to 1:400

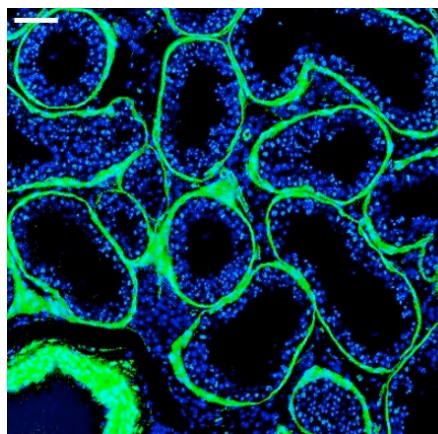
## Description

Alpha smooth muscle actin is a 42 kDa cytoskeletal protein expressed in smooth muscle cells of blood vessels, myofibroblasts, and myoepithelial cells. It also is found in tumors of smooth muscle and myoepithelial origin.

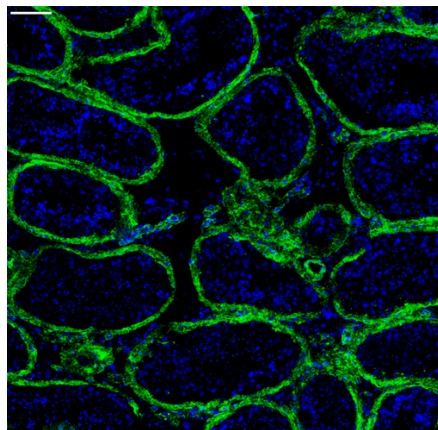
## References

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 testis (FFPE) stained with 141Pr-anti-αSMA (1A4) at a dilution of 1:200 (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.



Human frozen testis stained with 141Pr-anti-αSMA (1A4) at a dilution of 1:400 (green 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).**

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