

# Anti-Human CD227/Mucin 1 (SM3)-150Nd

## Pathologist-Verified Clone for Imaging Mass Cytometry

Catalog: 3150032D

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

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

Reactivity: Human

Clone: SM3

Isotype: Mouse IgG1

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: 1:50 to 1:100

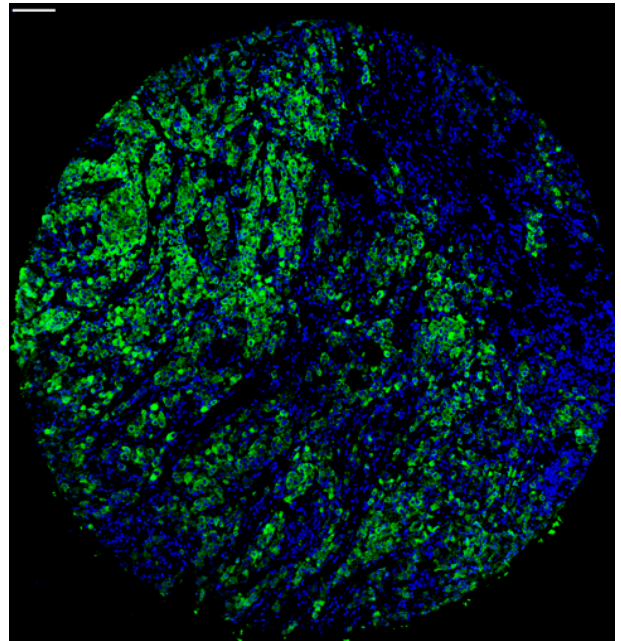
## Description

CD227, also known as MUC1, is a 500-1000 kDa proteoglycan that belongs to the epithelial mucin family. CD227 is variably expressed on the surfaces of normal and malignant glandular and ductal epithelial cells, and on some hematopoietic cell lineages including subsets of T cells, B cells, monocytes and dendritic cells. CD227 is anchored to the apical surface of the epithelial cell and functions as a lubricant to keep the cell hydrated and to protect against pathogens. Overexpression of CD227 is often associated with colon, breast, ovarian, lung and pancreatic cancers.

## 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 breast carcinoma (FFPE) stained Anti-Human CD227/Mucin 1 (SM3) at a dilution of 1:50 (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.

**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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