

## $\alpha$ -SMA [D4K9N] - 164Dy

**Catalog:** 716401

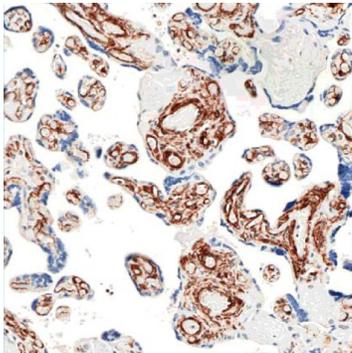
**Clone:** D4K9N

**Isotype:** Rabbit IgG

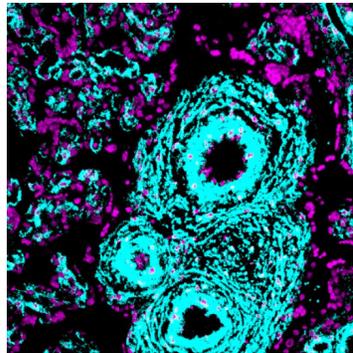
**Reactivity:** Human\*, Mouse\*, Rat

**Application:** MIBI-FFPE

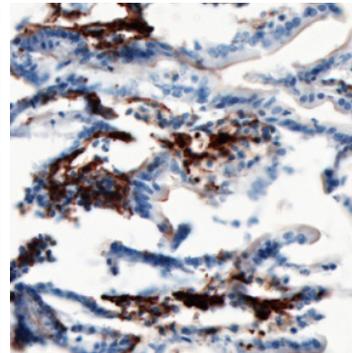
**Storage:** Supplied in antibody stabilizer with 0.05% sodium azide. Store at 4°C



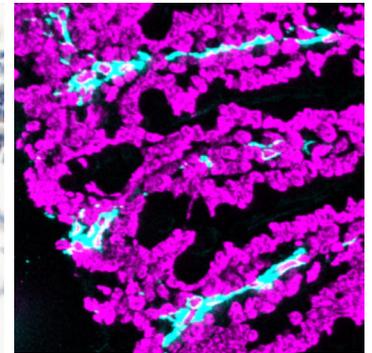
**IHC:**  $\alpha$ -SMA staining of FFPE human placenta



**MIBI:**  $\alpha$ -SMA (cyan) staining of FFPE human placenta, counterstained with dsDNA (magenta)



**IHC:**  $\alpha$ -SMA staining of FFPE mouse ileum



**MIBI:**  $\alpha$ -SMA staining (cyan) of FFPE mouse ileum, counterstained with dsDNA (magenta)

### Background

$\alpha$ -smooth muscle actin ( $\alpha$ -SMA, ACTA2) is one of six actin isoforms found in vertebrates.  $\alpha$ -SMA is expressed in a variety of tissues and is used as a marker of vascular smooth muscle, myofibroblasts, and cancer-associated fibroblasts (CAFs)

### Validation

Each lot of conjugated antibody is quality control tested by staining tissue following the MIBI Staining Protocol optimized for the applicable tissue format with subsequent MIBIscope analysis of stained tissue microarray using the appropriate positive and negative tissue field of views.

### Recommended Usage

Human FFPE: 2  $\mu$ g/mL dilution.  
 Mouse FFPE: 0.3  $\mu$ g/mL dilution.  
 For optimal results, the antibody should be titrated for each desired application.

### References

Emon, B., Bauer, J., Jain, Y., Jung, B., Saif, T. Biophysics of Tumor Microenvironment and Cancer Metastasis -A Mini Review. Computational and Structural Biotechnology. 2018; 16, 279-287.

\* Conjugate tested on human tissue and mouse tissue.