

Smoothelin (Clone R4A)

Mouse Monoclonal Antibody

Specificity: Human. Others not tested

Immunogen: Cytoskeletal extract of chicken gizzard

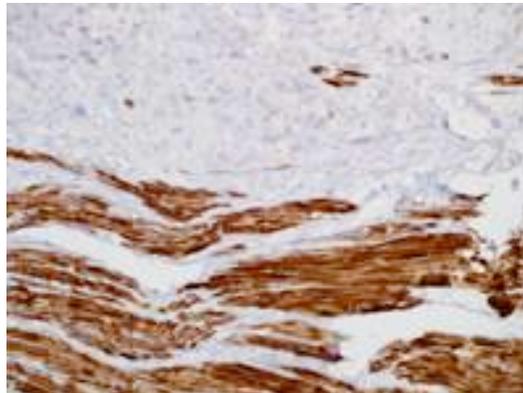
Ig Class: IgG1

Storage: Store vial at 4°C. When stored at 2-8°C, this antibody is stable for 24 months

Staining procedures: Use formalin-fixed and paraffin-embedded sections. *Retrieval conditions:* Pretreatment of deparaffinized tissue with heat-induced epitope retrieval is recommended. *Detection methods:* Polymer anti-mouse/rabbit Ig detection system. *Working dilution:* 1:50-100; *Positive Control:* Leiomyoma. *Cellular Localization:* Cytoplasmic/nuclear. *Intended Use:* In vitro diagnosis (IVD).

Description: Smoothelin is a constituent of the smooth muscle cell cytoskeleton protein exclusively found in differentiated smooth muscle cells (SMC). Cells with SMC-like characteristics, such as myofibroblasts and myoepithelial cells, as well as skeletal and cardiac muscle do not contain smoothelin. To distinguish bladder muscularis mucosae (MM) from muscularis propria (MP) muscle bundles is crucial for accurate staging of bladder carcinoma. Strong smoothelin expression is nearly exclusively observed in muscularis propria. Therefore, the staining pattern of MP (strongly positive) and MM (negative or weakly positive) makes this technique an attractive diagnostic tool for the sometimes difficult task of staging bladder urothelial carcinoma such as in transurethral resection specimens of urinary bladder tumors. Differentiating between smooth muscle tumors and other mesenchymal neoplasms of the GI tract can be challenging in small biopsies. Anti-smoothelin immunostaining can be helpful in differentiating benign (+) from malignant smooth muscle tumors (-), and other mimics(-).

Supplied As: Purified antibody with 0.2% BSA and 15mM sodium azide.



Formalin-fixed, paraffin-embedded human leiomyoma stained with anti-smoothelin antibody using peroxidase-conjugate and DAB chromogen. Note cytoplasmic staining of tumor cells

Cat #: Z2219 (1.0 ml)