

Recombinant Smoothelin (Differentiated Smooth Muscle Marker) Antibody

Rabbit Monoclonal Antibody [Clone SMTN/2320R]

Catalog No	Format	Size
6525-RBM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
6525-RBM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
6525-RBM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

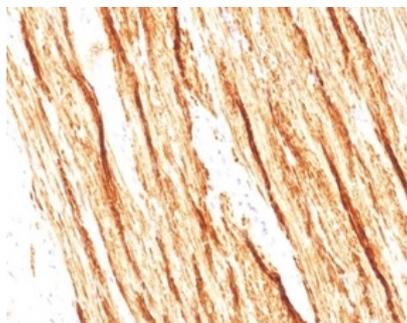
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

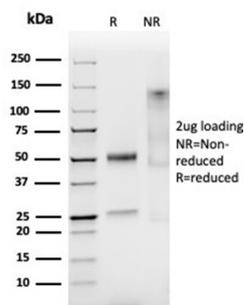
Clone	SMTN/2320R
Gene Name	SMTN
Immunogen	Recombinant full-length human Smoothelin (SMTN) protein
Host	Rabbit
Clonality	Monoclonal
Isotype / Light Chain	IgG / Kappa
Mol. Weight of Antigen	59/110kDa (short/long isoforms respectively)
Cellular Localization	Cytoplasm, Cytoskeleton
Species Reactivity	Human
Positive Control	Human smooth muscle.

*Optimal dilution for a specific application should be determined.

Product Images for Recombinant Smoothelin (Differentiated Smooth Muscle Marker) Antibody



Formalin-fixed, paraffin-embedded human colon stained with SmoothelinRabbit Recombinant Monoclonal Antibody (SMTN/2320R).



SDS-PAGE Analysis of Purified Smoothelin Rabbit Recombinant MonoclonalAb (SMTN/2320R). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human colon stained with Smoothelin Rabbit Recombinant Monoclonal Antibody (SMTN/2320R).

Specificity & Comments

Smoothelin is found exclusively in contractile smooth muscle cells. It associates with stress fibers and constitutes part of the cytoskeleton. In the vascular system, smoothelin expression is limited to large veins and arteries capable of pulsatile contraction. As a marker for the highly differentiated contractile smooth muscle cell, smoothelin expression is useful for studying vascular malformation and injury. It 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 antibody an attractive diagnostic tool. Anti-smoothelin immunostaining can be helpful in differentiating benign (+) from malignant smooth muscle tumors (-), and other mimics (-).

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Cardiovascular