

Smoothelin Rabbit pAb

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Catalog # AP55264

Product Information

| | |
|--------------------------------|--|
| Application | WB, IHC-P, IHC-F, IF |
| Primary Accession | P53814 |
| Reactivity | Human, Rat |
| Predicted | Mouse, Dog, Pig, Rabbit, Orangutan |
| Host | Rabbit |
| Clonality | Polyclonal |
| Calculated MW | 99059 |
| Physical State | Liquid |
| Immunogen | KLH conjugated synthetic peptide derived from human Smoothelin |
| Epitope Specificity | 851-917/917 |
| Isotype | IgG |
| Purity | affinity purified by Protein A |
| Buffer | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| SUBCELLULAR LOCATION | Cytoplasm > cytoskeleton. Exhibits a filamentous organization. |
| SIMILARITY | Belongs to the smoothelin family. Contains 1 CH (calponin-homology) domain. |
| Important Note | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| Background Descriptions | The cytoskeletal protein smoothelin is highly conserved among vertebrates and is expressed exclusively by contractile smooth muscle cells where it localizes to the filament network. Smoothelin associates with actin stress fibers but does not interact with desmin. At least two isoforms of smoothelin are produced by alternative splicing. The short isoform lacks amino acids 1-544 at the amino-terminus of the long isoform. The short isoform is expressed in visceral muscle tissue, including intestine and stomach, but not in brain, while the long isoform is expressed in all vascularized organs. 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. The gene encoding human smoothelin maps to chromosome 22q12.2. |

Additional Information

| | |
|---------------------------|---|
| Gene ID | 6525 |
| Other Names | Smoothelin, SMTN, SMSMO |
| Target/Specificity | Smooth muscle; contractile or vascular (for the long form). |
| Dilution | WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 |

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

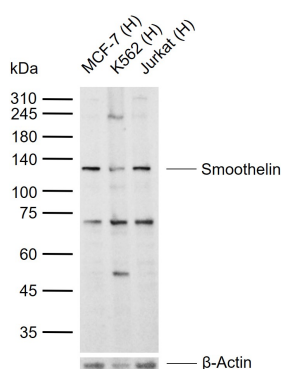
Protein Information

| | |
|--------------------------|---|
| Name | SMTN |
| Synonyms | SMSMO |
| Function | Structural protein of the cytoskeleton. |
| Cellular Location | Cytoplasm, cytoskeleton. Note=Exhibits a filamentous organization |
| Tissue Location | Smooth muscle; contractile or vascular (for the long form) |

Background

The cytoskeletal protein smoothelin is highly conserved among vertebrates and is expressed exclusively by contractile smooth muscle cells where it localizes to the filament network. Smoothelin associates with actin stress fibers but does not interact with desmin. At least two isoforms of smoothelin are produced by alternative splicing. The short isoform lacks amino acids 1–544 at the amino-terminus of the long isoform. The short isoform is expressed in visceral muscle tissue, including intestine and stomach, but not in brain, while the long isoform is expressed in all vascularized organs. 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. The gene encoding human smoothelin maps to chromosome 22q12.2.

Images



Sample:

Lane 1: Human MCF-7 cell lysates

Lane 2: Human K562 cell lysates

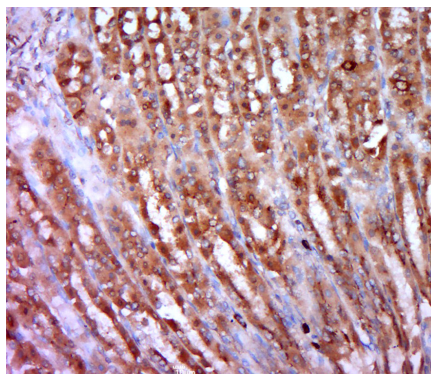
Lane 3: Human Jurkat cell lysates

Primary: Anti-Smoothelin (AP55264) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 100 kDa

Observed band size: 115 kDa



Paraformaldehyde-fixed, paraffin embedded (rat stomach tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Smoothelin) Polyclonal Antibody, Unconjugated (AP55264) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.