

# Rabbit Anti-Smoothelin antibody

# SL13740R

Product Name:	Smoothelin
Chinese Name:	平滑肌蛋白抗体
Alias:	FLJ35168; FLJ35365; FLJ35620; FLJ38597; Smoothelin; SMSMO; Smtn;
	SMTN HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Rabbit, Orangutan
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-
	500IF=1:100-500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	100kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Smoothelin:851-917/917
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.
PubMed:	<u>PubMed</u>
Product Detail:	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.

#### Function:

Structural protein of the cytoskeleton.

#### **Subcellular Location:**

Cytoplasm > cytoskeleton. Exhibits a filamentous organization.

# Tissue Specificity:

Smooth muscle; contractile or vascular (for the long form).

## Similarity:

Belongs to the smoothelin family.

Contains 1 CH (calponin-homology) domain.

## **SWISS:**

P53814

#### Gene ID:

6525

## **Database links:**

Entrez Gene: 6525 Human

Entrez Gene: 29856 Mouse

Entrez Gene: 289734 Rat

Omim: 602127 Human

SwissProt: P53814 Human

SwissProt: Q921U8 Mouse

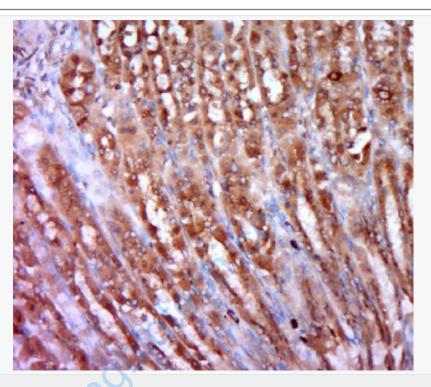
Unigene: 149098 Human

Unigene: 188516 Mouse

<u>Unigene: 40766</u> Rat

## **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



## Picture:

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 (SL13740R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.