

# ABfinity™ Smooth Muscle Actin Recombinant Rabbit Oligoclonal Antibody

Store at 2°C to 8°C (short-term), or -20°C (long-term)

Catalog Number 710487

Pub. No. MAN0007785 Rev. 1.00

Clonality: Oligoclonal	<b>Quantity</b> : 100 μg	<b>Volume</b> : 200 μL	Concentration: 0.5 mg/mL
Host/Class: Rabbit IgG	Reactivity: Human	Predicted Reactivity: Human Smooth muscle actin	

### **Product description**

Smooth muscle is found in the walls of blood vessels, lymphatic vessels, and a number of other tissues, where it provides mechanical support, and is a major component of the contractile apparatus. One of the primary components of smooth muscle is actin, which has six known isotypes in mammals. Smooth muscle actin exists in  $\alpha$ - and  $\gamma$ -actin isoforms. ABfinity  $^{\text{TM}}$  Smooth Muscle Actin Recombinant Rabbit Oligoclonal Antibody is specific to the  $\alpha$  isoform, which is prevalent within vascular smooth muscle cells.

## **Product specifications**

Immunogen: Peptide corresponding to amino acids 2–10

of human smooth muscle actin

Alternative Names: ACTSA, ACTVS, ACTA2

Apparent MW: ~40 kDa
Gene ID: 59
Protein Accession No.: P62736
Sequence Identity: Human
Isotype: IgG

**Lot**: See product label

### **Product applications**

Application	Species	Test Material	Concentration	
Western blotting	Mouse	Mouse heart	1–2 μg/mL	
Indirect ELISA	Human	Peptide	1.5 × 10 <sup>-4</sup> to 3 μg/mL	
Immunohisto- chemistry			1–2 μg/mL	

## Storage and handling

Store the antibody at 2°C to 8°C for up to 1 month, or –20°C for long storage. Avoid repeated freezing and thawing.

#### Stability

When stored as instructed, expires one year from date of receipt unless otherwise indicated on product label.

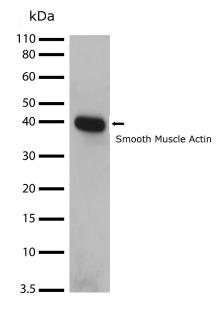


Figure 1 Western blot analysis of ABfinity™ Smooth Muscle Actin Recombinant Rabbit Oligoclonal Antibody (Cat. no. 710487).

Western blot analysis was performed on whole cell extracts from mouse heart. Endogenous level of Smooth Muscle Actin was detected at  $\sim40$  kDa using ABfinity\* Smooth Muscle Actin Recombinant Rabbit Oligoclonal Antibody at a concentration of 1  $\mu g/mL$ , followed by Goat Anti-Rabbit HRP (Cat. no. G21234) as a secondary antibody. The blot was developed using enhanced chemiluminescence (ECL) method.

#### Storage Buffer

Phosphate buffered saline (PBS) with 0.09% sodium azide.



**CAUTION!** Sodium azide is extremely toxic and may react with lead and copper plumbing to form highly explosive metal azides. Properly dispose of solutions containing sodium azide. Read the Safety Data Sheet (SDS) and follow the handling instructions. Wear appropriate protective eyewear, clothing and gloves. SDSs are available at **www.lifetechnologies.com/support**.

#### **Product documentation**

To obtain a Certificate of Analysis or Safety Data Sheet (SDS), visit <a href="http://www.lifetechnologies.com/support">http://www.lifetechnologies.com/support</a>.

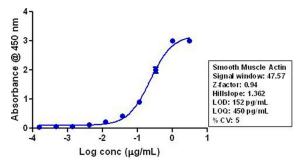


Figure 2 Indirect ELISA of ABfinity™ Smooth Muscle Actin Recombinant Rabbit Oligoclonal Antibody (Cat. no. 710487).

Indirect ELISA was performed to detect various dilutions of ABfinity™ Smooth Muscle Actin Recombinant Rabbit Oligoclonal Antibody, followed by Goat Anti-Rabbit HRP (Cat. no. G21234), to detect Smooth Muscle Actin peptide coated onto the plate. A non-linear regression analysis was performed (4 PL), LOD, and LOQ for the antibody was determined.

#### Limited product warranty

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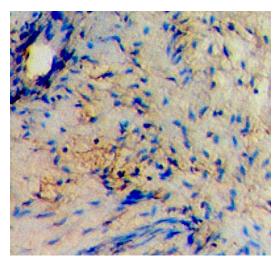


Figure 3 Immunohistochemistry analysis of ABfinity™ Smooth Muscle Actin Recombinant Rabbit Oligoclonal Antibody (Cat. no. 710487).

Immunohistochemistry analysis of human uterine leiomyoma tissue section stained with ABfinity™ Smooth Muscle Actin Recombinant Rabbit Oligoclonal Antibody. HRP conjugated goat anti-rabbit IgG was used as secondary antibody and haematoxylin was used to stain the nucleus.

#### **Explanation of Symbols**

Symbol	Description	Symbol	Description	Symbol	Description
•••	Manufacturer	REF	Catalog number	LOT	Batch code
	Use by		Temperature limitation		
<u> </u>	Consult instructions for use	$\triangle$	Caution, consult accompanying documents		

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