

## Anti-smooth muscle Myosin heavy chain 11 Antibody [JE60-21]

# HA722863



<b>Product Type:</b>	Recombinant Rabbit monoclonal IgG, primary antibodies
<b>Species reactivity:</b>	Human, Mouse, Rat
<b>Applications:</b>	WB, IHC-P, mIHC, IF-Tissue
<b>Molecular Wt:</b>	Predicted band size: 227 kDa
<b>Clone number:</b>	JE60-21

**Description:** The protein encoded by this gene is a smooth muscle myosin belonging to the myosin heavy chain family. The gene product is a subunit of a hexameric protein that consists of two heavy chain subunits and two pairs of non-identical light chain subunits. It functions as a major contractile protein, converting chemical energy into mechanical energy through the hydrolysis of ATP. A chromosomal rearrangement involving this gene is associated with acute myeloid leukemia of the M4Eo subtype. Mutations in this gene are associated with visceral myopathy, megacystis-microcolon-intestinal hypoperistalsis syndrome 2, and familial thoracic aortic aneurysm 4.

**Immunogen:** Synthetic peptide within human smooth muscle Myosin heavy chain 11 aa 1-50 / 1,972.

**Positive control:** Mouse small intestine tissue lysate, rat ovary tissue lysate, human small intestine tissue, mouse small intestine tissue, rat small intestine tissue.

**Subcellular location:** Melanosome.

**Database links:** SwissProt: P35749 Human | O08638 Mouse | Q63862 Rat

### Recommended Dilutions:

<b>WB</b>	1:1,000
<b>IHC-P</b>	1:200-1:1,000
<b>mIHC</b>	1:200
<b>IF-Tissue</b>	1:500

**Storage Buffer:** 1\*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

**Storage Instruction:** Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

**Purity:** Protein A affinity purified.

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Orders:0086-571-88062880

Technical:0086-571-89986345

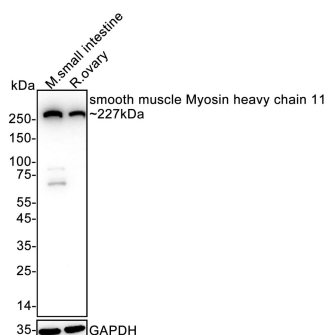
Service mail:support@huabio.cn

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## Images

**Fig1:** Western blot analysis of smooth muscle Myosin heavy chain 11 on different lysates with Rabbit anti-smooth muscle Myosin heavy chain 11 antibody (HA722863) at 1/1,000 dilution.

Lane 1: mouse small intestine tissue lysate (40 µg/Lane)  
Lane 2: rat ovary tissue lysate (40 µg/Lane)

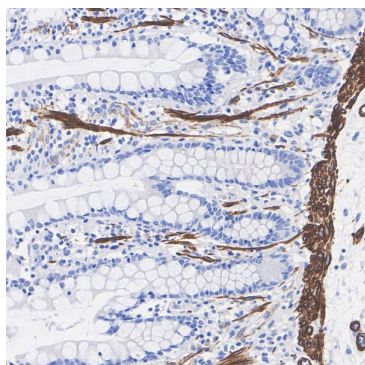


Predicted band size: 227 kDa  
Observed band size: 227 kDa

Exposure time: 4 seconds; ECL: K1801;

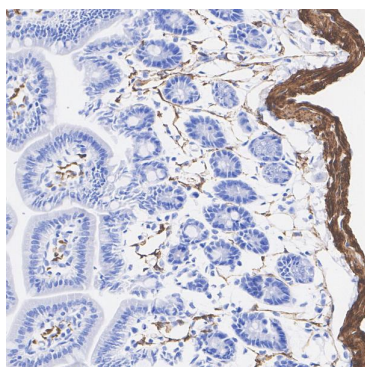
4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDN/TBST for 1 hour at room temperature. The primary antibody (HA722863) at 1/1,000 dilution was used in 5% NFDN/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.



**Fig2:** Immunohistochemical analysis of paraffin-embedded human small intestine tissue with Rabbit anti-smooth muscle Myosin heavy chain 11 antibody (HA722863) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA722863) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.



**Fig3:** Immunohistochemical analysis of paraffin-embedded mouse small intestine tissue with Rabbit anti-smooth muscle Myosin heavy chain 11 antibody (HA722863) at 1/1,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA722863) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

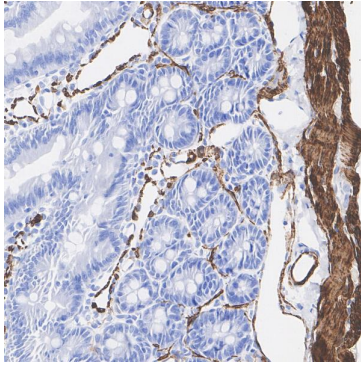
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**Fig4:** Immunohistochemical analysis of paraffin-embedded rat small intestine tissue with Rabbit anti-smooth muscle Myosin heavy chain 11 antibody (HA722863) at 1/200 dilution.

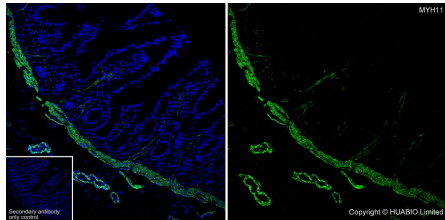
The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH<sub>2</sub>O and PBS, and then probed with the primary antibody (HA722863) at 1/1,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

**Fig5:** Application: Immunofluorescence (IF-tissue)

Species: Human

Tissue: small intestine

Sample: Paraffin-embedded section



Antigen retrieval: Heat-mediated, Tris-EDTA buffer (pH 9.0), 20 minutes at 95°C.

Wash buffer: 1× PBS

Endogenous peroxidase blocking: 3% H<sub>2</sub>O<sub>2</sub>, 10 minutes.

Blocking: 1% BSA + 10% normal goat serum, 10 minutes at room temperature.

Primary antibody: HA722863, 1/500, overnight at 4°C.

Secondary antibody: Goat Anti-Rabbit IgG (iFluor™ 488, HA1121), 1.5 hours at room temperature.

**Note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

## Background References

1. Boreham MK, Miller RT, Schaffer JI, Word RA. Smooth muscle myosin heavy chain and caldesmon expression in the anterior vaginal wall of women with and without pelvic organ prolapse. *Am J Obstet Gynecol.* 2001 Oct;185(4):944-52. doi: 10.1067/mob.2001.117342. PMID: 11641683.
2. Li M, Li S, Rao Y, Cui S, Gou K. Loss of smooth muscle myosin heavy chain results in the bladder and stomach developing lesion during foetal development in mice. *J Genet.* 2018 Jun;97(2):469-475. PMID: 29932067.

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