**SMMHC Polyclonal antibody**

**Catalog Number:** 21404-1-AP

**Basic Information**

- **Catalog Number:** 21404-1-AP
- **Size:** 150μl, Concentration: 700 μg/ml by Nanodrop
- **Source:** Rabbit
- **Isotype:** IgG
- **Immunogen Catalog Number:** AG16114
- **GenBank Accession Number:** BC104906
- **GeneID (NCBI):** 4629
- **Full Name:** myosin, heavy chain 11, smooth muscle
- **Calculated MW:** 1979 aa, 228 kDa
- **Observed MW:** 200 kDa
- **Purification Method:** Antigen affinity purification
- **Recommended Dilutions:**
  - **WB:** 1:1000-1:4000
  - **IHC:** 1:1000-1:4000
  - **IF:** 1:50-1:500

**Applications**

- **Tested Applications:** FC, IF, IHC, WB, ELISA
- **Cited Applications:** IF, IHC, WB
- **Species Specificity:** human, mouse, rat
- **Cited Species:** human, rat, mouse

**Positive Controls:**
- **WB:** mouse uterus tissue,
- **IHC:** human colon tissue, rat eye tissue, mouse eye tissue, rat bladder tissue, human skeletal muscle tissue
- **IF:** mouse heart tissue

**Note-IHC:** suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

**Background Information**

SMMHC (smooth muscle myosin heavy chain; MYH11) is a contractile protein of smooth muscle cells. It is specifically expressed in cells derived from smooth muscle lineages. SMMHC is used as vascular smooth muscle cell (vSMC) contractile marker. It is also an excellent marker for myoepithelial cells, with no or few cross-reaction with myofibroblasts, thus very useful in the evaluation of stromal invasion.

**Notable Publications**

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<th>Author</th>
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<tr>
<td>Jinghan Lin</td>
<td>36155059</td>
<td>Biochem Biophys Res Commun</td>
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<td>Ziqing Li</td>
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<td>Acta Physiol (Oxf)</td>
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<tr>
<td>Yuanyuan Li</td>
<td>34732321</td>
<td>Immunol Lett</td>
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**Storage**

- **Storage:** Store at -20°C. Stable for one year after shipment.
- **Storage Buffer:** PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
- **Aliquoting is unnecessary for -20°C storage**

*** 20μl sizes contain 0.1% BSA

Mouse uterus tissue were subjected to SDS PAGE followed by western blot with 21404-1-AP (SMMHC antibody at dilution of 1:2000 incubated at room temperature for 1.5 hours.

Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using 21404-1-AP (SMMHC antibody) at dilution of 1:30 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).


1X10^6 C2C12 cells were intracellularly stained with 0.4 ug Anti-Human SMMHC (21404-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).