### For Research Use Only

# SMMHC Polyclonal antibody

Catalog Number: 21404-1-AP

38 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 21404-1-AP BC104906 GeneID (NCBI): Size: 700 μg/ml 4629 **UNIPROT ID:** Source: Rabbit P35749 Full Name: Isotype:

myosin, heavy chain 11, smooth

muscle Immunogen Catalog Number:

AG16114 Calculated MW:

1979 aa, 228 kDa Observed MW: 200 kDa

**Applications** 

**Tested Applications:** FC, IF/ICC, IHC, WB, ELISA

Cited Applications: WB, IF, IHC Species Specificity: human, mouse, rat **Cited Species:** 

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

buffer pH 6.0

human, rat, mouse

**Purification Method:** Antigen affinity purification Recommended Dilutions:

WB 1:1000-1:4000 IHC 1:1000-1:4000 IF 1:50-1:500

Positive Controls:

WB: mouse uterus tissue.

IHC: human colon tissue, rat eye tissue, mouse eye tissue, rat bladder tissue, human skeletal muscle

IF: mouse heart tissue,

# **Background Information**

SMMHC (smooth muscle myosin heavy chain; MYH11) is a contractile protein of smooth muscle cells. It is  $specifically\ expressed\ in\ cells\ derived\ from\ smooth\ muscle\ lineages.\ SMMHC\ is\ used\ as\ vascular\ smooth\ muscle\ lineages.$ 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**

Author	Pubmed ID	Journal	Application
Jinghan Lin	36155059	Biochem Biophys Res Commun	WB
Ziqing Li	32886850	Acta Physiol (Oxf)	WB
Yuanyuan Li	34732321	Immunol Lett	WB, IF

Storage

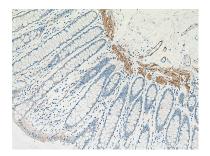
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

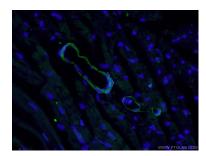
## **Selected Validation Data**



Immunohistochemical analysis of paraffinembedded human colon tissue slide using 21404-1-AP (SMMHC antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



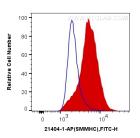
mouse uterus tissue were subjected to SDS PAGE followed by western blot with 21404-1-AP (SMMHC antibody at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using 21404-1-AP (SMMHC antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).

Immunohistochemical analysis of paraffinembedded rat eye tissue slide using 21404-1-AP (SMMHC antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunohistochemical analysis of paraffinembedded mouse eye tissue slide using 21404-1-AP (SMMHC antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10^6 C2C12 cells were intracellularly stained with 0.4 ug Anti-Human SMMHC (21404-1-AP) and Coralite®488-Conjugated Affini Pure 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).