

# Smooth Muscle Myosin Heavy Chain (SM-MHC) (Leiomyosarcoma & Myoepithelial Cell Marker) Antibody - W

Mouse Monoclonal Antibody [Clone SMMS-1 ]  
Catalog # AH11944

## Product Information

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<b>Application</b>	IHC, IF, FC
<b>Primary Accession</b>	<a href="#">P35749</a>
<b>Other Accession</b>	<a href="#">4629</a> , <a href="#">460109</a>
<b>Reactivity</b>	Human, Rat, Rabbit, Pig, Chicken, Bovine, Cat, Guinea Pig, Dog
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	Mouse / IgG1, kappa
<b>Clone Names</b>	SMMS-1
<b>Calculated MW</b>	227339

## Additional Information

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<b>Gene ID</b>	4629
<b>Other Names</b>	Myosin-11, Myosin heavy chain 11, Myosin heavy chain, smooth muscle isoform, SMMHC, MYH11, KIAA0866
<b>Application Note</b>	IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
<b>Storage</b>	Store at 2 to 8°C.Antibody is stable for 24 months.
<b>Precautions</b>	Smooth Muscle Myosin Heavy Chain (SM-MHC) (Leiomyosarcoma & Myoepithelial Cell Marker) Antibody - W is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	MYH11
<b>Synonyms</b>	KIAA0866
<b>Function</b>	Muscle contraction.
<b>Cellular Location</b>	Melanosome. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV. Thick filaments of the myofibrils
<b>Tissue Location</b>	Smooth muscle; expressed in the umbilical artery, bladder, esophagus and trachea. Isoform 1 is mostly found in slowly contracting tonic muscles.

## Background

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Smooth muscle myosin heavy chain (SM-MHC) is a cytoplasmic structural protein, which is a major component of the contractile apparatus in smooth muscle cells. Expression of smooth muscle myosin is developmentally regulated, appearing early in smooth muscle development, and is specific for smooth muscle development. Two isoforms of smooth muscle myosin heavy chain have been identified, designated MHC-1 and MHC-2. The antibody may be useful for the study of breast tumors as the presence of an intact layer of myoepithelial cells is an important feature, which may distinguish benign breast lesions and carcinoma in situ from invasive tumors.

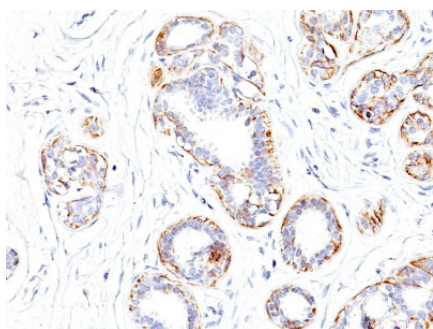
## References

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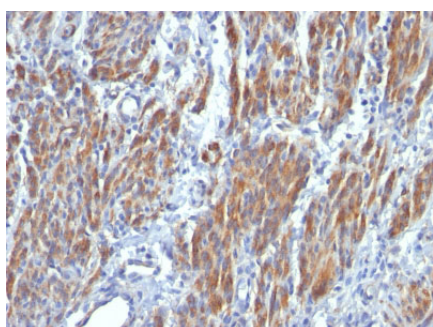
D.Lazard, X. Sastre, M.G.Frid, M.A.Glukhova, J.-P. Thiery and V.E.Koteliansky. Expression of smooth muscle-specific proteins in myoepithelium and stromal myofibroblasts of normal and malignant human breast tissue. Proc. Natl. Acad. Sci. USA, 1993, v.90: 999-1003. | N.P. Wang, B.C. Wan, M. Skelly, M.G. Frid, M.A. Glukhova, V.E. Koteliansky, A.M. Gown. Antibodies to novel myoepithelium-associated proteins distinguish benign lesions and in-situ- carcinoma from invasive carcinoma of the breast. Applied Immunohistochemistry 1997;5(3):141-151

## Images

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Formalin-fixed, paraffin-embedded human Breast Carcinoma stained with SM-MHC Monoclonal Antibody (SMMS-1).



Formalin-fixed, paraffin-embedded human Leiomyosarcoma stained with SM-MHC Monoclonal Antibody (SMMS-1).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.