

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

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

#### **Product Information**

ApplicationIHC, IF, FCPrimary AccessionP35749Other Accession4629, 460109

**Reactivity** Human, Rat, Rabbit, Pig, Chicken, Bovine, Cat, Guinea Pig, Dog

**Host** Mouse **Clonality** Monoclonal

**Isotype** Mouse / IgG1, kappa

Clone Names SMMS-1 Calculated MW 227339

#### **Additional Information**

**Gene ID** 4629

Other Names Myosin-11, Myosin heavy chain 11, Myosin heavy chain, smooth muscle

isoform, SMMHC, MYH11, KIAA0866

**Application Note** IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50

**Storage** Store at 2 to 8°C.Antibody is stable for 24 months.

Precautions 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**

Name MYH11

Synonyms KIAA0866

**Function** Muscle contraction.

**Cellular Location** Melanosome. Note=Identified by mass spectrometry in melanosome fractions

from stage I to stage IV. Thick filaments of the myofibrils

**Tissue Location** Smooth muscle; expressed in the umbilical artery, bladder, esophagus and

trachea. Isoform 1 is mostly found in slowly contracting tonic muscles.

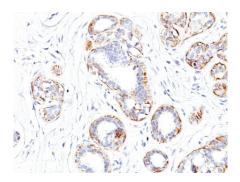
## **Background**

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.

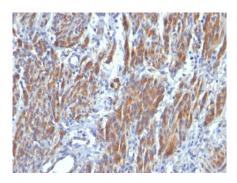
#### References

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 distinquish benign lesions and in-situ- carcinoma from invasive carcinoma of the breast. Applied Immunohistochemistry 1997;5(3):141-151

### **Images**



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'.