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

Mouse Monoclonal Antibody [Clone ID8]
Catalog # AH11950

Product Information

Application	IHC, IF, FC
Primary Accession	P35749
Other Accession	4629, 460109
Reactivity	Human, Rat, Rabbit, Pig, Chicken, Bovine, Cat, Guinea Pig, Dog
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	ID8
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.

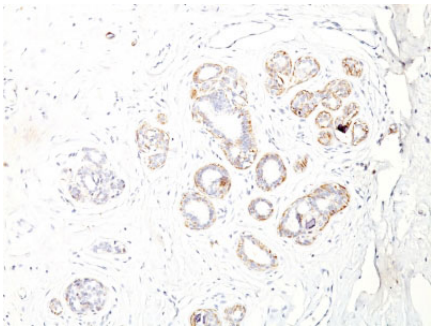
Background

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.

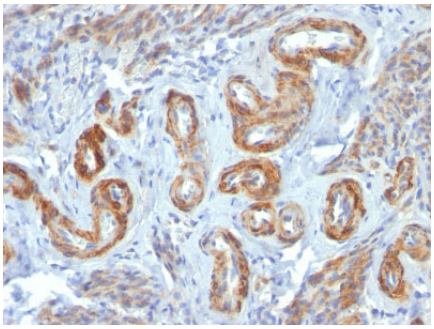
References

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 distinguish 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 (ID8).



Formalin-fixed, paraffin-embedded human Leiomyosarcoma stained with SM-MHC Monoclonal Antibody (ID8).