

# Smooth Muscle Myosin Heavy Chain (SM-MHC) (Leiomyosarcoma & Myoepithelial Cell Marker); Clone ID8 (Concentrate)


**Availability/Contents:**

<u>Item #</u>	<u>Volume</u>
RA0229-C.5	0.5 ml

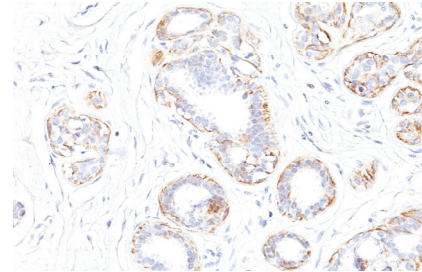
**Description:**

Species:	Mouse
Immunogen:	Human uterus extract
Clone:	ID8
Isotype:	IgG1, kappa
Entrez Gene ID:	4629 (Human)
Hu Chromosome Loc.:	16p13.11
Synonyms:	AAT4; Myosin heavy chain 11 (MYH11); Myosin heavy chain 11 smooth muscle; Smooth muscle myosin heavy chain 11; Myosin-11; SM1; SM2; SMHC; SMMHC
Mol. Weight of Antigen:	205kDa (MHC-1) and 200kDa (MHC-2)
Format:	200µg/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Specificity:	This 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.
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.
Species Reactivity:	Human, Cow, Pig, Dog, Cat, Rabbit, Rat, Guinea pig and Chicken. Others not known.
Positive Control:	Uterus or normal breast.
Cellular Localization:	Cytoplasmic
Titer/ Working Dilution:	Immunohistochemistry (Frozen and Formalin-fixed): 0.5-1 µg/ml Flow Cytometry: 0.5-1 µg/million cells Immunofluorescence: 0.5-1 µg/ml Western Blotting: 0.5-1 µg/ml Immunoprecipitation: 0.5-1 µg/500µg protein lysate
Microbiological State:	This product is not sterile.

 Storage: 2° C  8° C


 ScyTek Laboratories, Inc.  
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 Logan, UT 84321  
 U.S.A.

**Uses/Limitations:** Not to be taken internally.  
 For Research Use Only.  
 This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.  
 Do not use if reagent becomes cloudy.  
 Do not use past expiration date.  
 Non-Sterile.



Formalin-fixed, paraffin-embedded human breast carcinoma stained with SM-MHC; Clone ID8.

**Ordering Information and Current Pricing at [www.scytek.com](http://www.scytek.com)**

**Procedure:**

1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with EDTA Buffer (10X) HIER Solution (pH 8.0) (ScyTek catalog# ETA).
2. **Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
3. **Visualization:** For maximum staining intensity we recommend the “UltraTek HRP Anti-Polyvalent Lab Pack” (ScyTek catalog# UHP125, see IFU for instructions) combined with the “DAB Chromogen/Substrate Bulk Pack (High Contrast)” (ScyTek catalog# ACV500, see IFU for instructions).


**Precautions:** Contains Sodium Azide as a preservative (0.09% w/v).  
 Do not pipette by mouth.  
 Avoid contact of reagents and specimens with skin and mucous membranes.  
 Avoid microbial contamination of reagents or increased nonspecific staining may occur.  
 This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

**References:**

1. 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.
2. 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.

**Warranty:** No products or “Instructions For Use (IFU)” are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.

Storage: 2° C  8° C



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