


# Actin, $\alpha$ -Smooth Muscle; Clone 1A4 (Concentrate)

<b>Availability/Contents:</b>	<u>Item #</u>	<u>Volume</u>
	A00002-C.1	0.1 ml
	A00002-C	1 ml


**Description:**

Species:	Mouse
Immunogen:	N-terminal decapeptide of alpha smooth muscle isoform of actin and conjugated to KLH.
Clone:	1A4
Isotype:	IgG2a, kappa
Entrez Gene ID:	59 (Human)
Hu Chromosome Loc.:	10q23.31
Synonyms:	ACTA2, Actin Alpha 2 Smooth Muscle Aorta, Actin Aortic Smooth Muscle, Actin Vascular Smooth Muscle, ACTSA, ACTVS, Alpha 2 Actin, Alpha Actin 2, Alpha Cardiac Actin, Alpha Smooth Muscle, Alpha-actin-2, Aortic Smooth Muscle, ASMA, Cell Growth-inhibiting Gene 46 Protein, Growth Inhibiting Gene 46
Mol. Weight of Antigen:	42kDa
Format:	200 $\mu$ g/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Specificity:	This MAb is highly specific to actin from smooth muscles. Its epitope lies in the first four N-terminal amino acids. This MAb does not stain cardiac or skeletal muscle; however, it does stain myofibroblasts and myoepithelial cells. In most cases of rhabdomyosarcoma, this antibody yields negative results whereas anti-muscle specific actin and myogenin are positive. Leiomyosarcomas are positive only with anti-muscle specific actin and anti-smooth muscle actin and are negative with anti-myogenin.
Background:	Actin is a major component of the cytoskeleton and is present in most cell types. This antibody could be used together with anti-muscle specific actin and myogenin in making a diagnosis of smooth muscle and skeletal muscle tumors.
Species Reactivity:	Human, Baboon, Monkey, Cow, Pig, Sheep, Goat, Cat, Dog, Rabbit, Mouse, Rat, Guinea Pig and Chicken. Others not known.
Positive Control:	Blood vessels in all tissues, smooth muscle or leiomyosarcoma.
Cellular Localization:	Cytoplasmic
Titer/ Working Dilution:	Immunohistochemistry (Frozen & Formalin-fixed): 0.5-1 $\mu$ g/ml Flow Cytometry: 0.5-1 $\mu$ g/million cells Immunofluorescence: 0.5-1 $\mu$ g/ml Western Blotting: 0.5-1 $\mu$ g/ml Immunoprecipitation: 0.5-1 $\mu$ g/500 $\mu$ g protein lysate
Microbiological State:	This product is not sterile.

Storage: 2° C  8° C

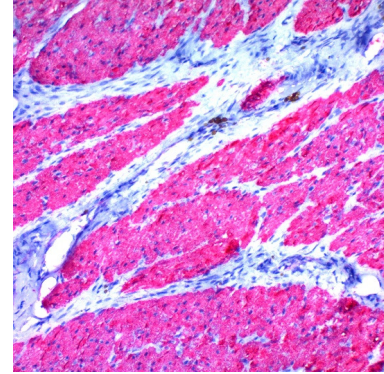


ScyTek Laboratories, Inc.  
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 U.S.A.



EC REP  
 Emergo Europe  
 Prinsessegracht 20  
 2514 AP The Hague, The Netherlands

**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.



FFPE Uterus stained with Actin, Smooth Muscle; Clone 1A4. 200X magnification.

**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 Citrate Plus (ScyTek catalog# CPL500).
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. Pierini A, Cinti F, Binanti D, Pisani G. Primary leiomyosarcoma of the jugular vein in a dog. Open Veterinary Journal. 2017;7(1):61-4.
2. Altinay S, Kusaslan R. Gastrointestinal autonomic nerve tumour of jejunum presenting as a perfore mass. JOURNAL OF THE PAKISTAN MEDICAL ASSOCIATION. 2014 Apr 1;64(4):461-4.
3. De Lisio M, Boppart MD, Huntsman HD, Zachwieja N, Zou K, Ripchik P, Valero MC. Mesenchymal stem cells contribute to vascular growth in. Am J Physiol Heart Circ Physiol. 2013;304:H72-81.

**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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