

# Monoclonal Mouse Antibody to Human Alpha-Smooth Muscle Actin

## Description:

Immunogen:	N-Terminal decapeptide of alpha smooth muscle is a form of actin; acetylated at the N-terminus and conjugated to KLH at the C-terminus.
Clone:	1A4
Isotype:	IgG <sub>2a</sub> /K
Format:	This antibody has been pretitered and quality controlled to work on formalin-fixed paraffin-embedded as well as acetone fixed cryostat tissue sections. No further titration is required.
Specificity:	Recognizes the $\alpha$ -smooth muscle isoform of actin. It shows no cross reaction with actin from fibroblasts ( $\beta$ - and $\gamma$ -cytoplasmic), striated muscle ( $\alpha$ -sarcometric), and myocardium ( $\alpha$ -myocardial). Its epitope is composed of the acetyl group and the first 4 amino acids on the N-terminal end of the peptidic chain of $\alpha$ -smooth actin. ScyTek's 1A4 stains smooth muscle cells in vessel walls, gut wall, and myometrium. Myoepithelial cells in breast and salivary gland are also stained as they also contain this actin. This Mab is reportedly useful for identifying tumors arising from smooth muscle and myoepithelial cells.
Species Reactivity:	Human, Baboon, Cow, Rabbit, Mouse, Rat, Chicken; Others-not known
Positive Control:	Blood vessles
Cellular Localization:	Cytoplasmic

**Uses/Limitations:** Immunofluorescence. Western Blotting, Immunohistochemistry (frozen & formalin/paraffin) (Staining of formalin/paraffin tissues is enhanced by boiling the tissue sections in 10mM citrate buffer, pH 6.0, for 10 minutes followed by cooling at room temperature for 20 minutes.)  
For Research Use Only.  
Do not use past expiration date.

**Storage:** 2-8° Centigrade.

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**Procedure:** ScyTek suggests 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.

**Precautions:** Contains Sodium Azide as a preservative.  
Do not pipette by mouth.

### References:

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24. For further references contact the Customer Service Department of ScyTek Laboratories, Inc.