

Actin, Smooth Muscle Ab-1 (Clone 1A4; same as asm-1)

Mouse Monoclonal Antibody

Cat. #MS-113-P0, -P1, or -P (0.1ml, 0.5ml, or 1.0ml at 40µg/ml) (Purified Ab with BSA and Azide)

Cat. #MS-113-P1ABX or -PABX (0.1ml or 0.2ml at 1.0mg/ml) (Purified Ab without BSA and Azide)

Cat. #MS-113-B0, -B1, or -B (0.1ml, 0.5ml, or 1.0ml at 40µg/ml) (Biotin-labeled Ab with BSA and Azide)

Cat. #MS-113-R7 (7.0ml) (Ready-to-Use for Immunohistochemistry)

Cat. #MS-113-RQ (12.0ml) (Ready-to-Use for Immunohistochemistry)

Cat. #MS-113-PCS (5 Slides) (Positive Control for Histology)

Please note this data sheet has been changed effective December 6, 2011

Comments: Ab-1 stains smooth muscle cells in vessel walls, gut wall, and myometrium. Myoepithelial cells in breast and salivary gland are also stained. This antibody reacts with tumors arising from smooth muscles and myoepithelial cells. Use Actin Ab-5 (Cat# MS-1295-P) and/or Tubulin Ab-4 (Cat# MS-719-P) for monitoring total protein load on Western blots.

Epitope: Acetyl group and the first 4 amino acids on the N-terminal end of the peptidic chain of alpha-smooth actin.

Species Reactivity: Human, Baboon, Cow, Rabbit, Mouse, Rat, Chicken; Others-not known.

Clone Designation: 1A4 (also known as asm-1)

Ig Isotype / Light Chain: IgG_{2a} / κ

Immunogen: N-Terminal decapeptide of alpha smooth muscle isoform of actin; acetylated at the N-terminus.

Applications and Suggested Dilutions:

- Immunofluorescence
 - Immunohistology (Formalin/paraffin)
- Use Ab 1:800 for 20 minutes at RT using the LP Detection System)

* [No special pretreatment is required for the immunohistochemical staining of formalin/paraffin tissues.]

Use Ab 1:800 for 20 minutes at RT using UltraVision Detection Quanto Systems)

* [Staining of formalin-fixed tissues REQUIRES boiling tissue sections in 1mM EDTA, pH 8.0, (Lab Vision Cat. #AP-9004), for 10-20 min followed by cooling at RT for 20 min.]

The optimal dilution for a specific application should be determined by the investigator.

- **Staining tips:** If the staining is too light, use lower dilution or longer time.
If the staining is too strong, use higher dilution or shorter time.

Positive Control: Smooth muscle or leiomyosarcoma

Cellular Localization: Cytoplasmic

Storage and Stability:

Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

Supplied As:

40µg/ml antibody purified from the ascites fluid by Protein A chromatography. Prepared in 1ml of 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide. Also available without BSA and azide at 1mg/ml,

or

Prediluted antibody which is ready-to-use for staining of formalin-fixed, paraffin-embedded tissues.

Key References:

1. Skalli O *et al.* Journal of Cell Biology, 1986, 103:2787-96.

Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products 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 data sheets and website. Our warranty is limited to the actual price paid for the product. Lab Vision is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

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