

MOUSE ANTI- HUMAN ACTIN [alpha SMOOTH MUSCLE isoform] MONOCLONAL ANTIBODY

CATALOG NUMBER: CBL171 QUANTITY: 50 μg

LOT NUMBER: XXXXXXXX CONCENTRATION: 1 mg/mL

CLONE NAME: ASM-1 HOST/ISOTYPE: Ms IqG2a

ALTERNATE NAMES: EPITOPE: N-terminus

BACKGROUND: ASM-1 represents an excellent marker for myogenic soft tissue tumors and smooth muscle

differentiation. This antibody reacts with many types of smooth muscle cells, such as those present in vascular walls, intestinal muscularis mucosae and propria, myometrium, stroma of various tissues, and is also positive for myoepithelial cells of various glands, notably salivary and mammary gland. Myogenic soft tissues detected include leiomyosarcomas, leiomyomas, and certain stromal cells surrounding infiltrating ductal carcinoma of the

breast.

SPECIFICITY: This antibody is specific for the alpha-smooth-muscle isoform of actin (MW 43 kDa).

APPLICATIONS: Westerm blot

Immunohistochemistry: 1:2000; Frozen and formalin-fixed, paraffin-embedded tissues;

protease pretreatment is recommended for paraffin-embedded sections.

Immunofluorescence

Optimal working dilutions must be determined by the end user.

`SPECIES REACTIVITY: Human, mouse, rat, bovine, equine and chicken. Reactivity with other species has not

been confirmed.

IMMUNOGEN: Synthetic peptide corresponding to the ten N-terminal amino acids of the alpha-smooth

muscle isoform of actin.

CONTROL: Positive reaction using stress fibers of smooth muscle-derived cells and some smooth

muscle subtype fibroblasts

PRESENTATION: Liquid. Protein A purified immunoglobulin in PBS containing 0.09% sodium azide.

STORAGE/HANDLING: Maintain at -20°C in undiluted aliquots for up to 12 months from date of receipt.

REFERENCES: Ehler E, Fowler VM, Perriard JC. (2004). Myofibrillogenesis in the developing chicken heart: Role of

actin isoforms and of pointed end actin capping protein tropomodulin during thin filament assembly.

Developmental Dynamics 229: 745-755.

Demirkesen C, Hoede N, Moll R. (1995). Epithelial markers and differentiation in adnexal neoplasms of the skin: an immunohistochemical study including individual cytokeratins. *J Cutan Pathol.* **22**: 518-

535.

Schurch, W. et al. (1987). Intermediate filament proteins and actin isoforms as markers for soft tissue

tumor differentiation and origin. I. Smooth muscle tumors. Am. J. Pathol. 128: 91-103.

Skalli, O. et al. (1986). A monoclonal antibody against alpha-smooth muscle actin: a new probe for

smooth muscle differentiation. J. Cell Biol. 103: 2787-2796.



Important Note:

During shipment, small volumes of product will occasionally become entrapped in the seal of the product vial. For products with volumes of $200 \mu L$ or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.

For research use only; not for use as a diagnostic.

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