

Resource Summary Report

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Monoclonal Anti-Actin, ?-Smooth Muscle

RRID:AB_476701

Type: Antibody

Proper Citation

Sigma-Aldrich Cat# A2547, RRID:AB_476701

Antibody Information

URL: http://antibodyregistry.org/AB_476701

Proper Citation: Sigma-Aldrich Cat# A2547, RRID:AB_476701

Target Antigen: Actin, ?-Smooth Muscle

Host Organism: mouse

Clonality: monoclonal

Comments: Applications: immunohistochemistry (formalin-fixed, paraffin-embedded sections), immunohistochemistry (frozen sections), indirect immunofluorescence
Info: Independent validation by the NYU Lagone was performed for: IHC. This antibody was found to have the following characteristics: Functional in human:FALSE, NonFunctional in human:FALSE, Functional in animal:FALSE, NonFunctional in animal:FALSE

Antibody Name: Monoclonal Anti-Actin, ?-Smooth Muscle

Description: This monoclonal targets Actin, ?-Smooth Muscle

Target Organism: guinea pig, chicken, rat, snake, canine, goat, mouse, frog, rabbit, bovine, human, sheep

Clone ID: Clone 1A4

Defining Citation: [PMID:18186028](#)

Antibody ID: AB_476701

Vendor: Sigma-Aldrich

Catalog Number: A2547

Alternative Catalog Numbers: A2547-100UL

Record Creation Time: 20250820T040748+0000

Record Last Update: 20250820T180744+0000

Ratings and Alerts

- Independent validation by the NYU Lagone was performed for: IHC. This antibody was found to have the following characteristics: Functional in human:FALSE, NonFunctional in human:FALSE, Functional in animal:FALSE, NonFunctional in animal:FALSE - NYU Langone's Center for Biospecimen Research and Development <https://med.nyu.edu/research/scientific-cores-shared-resources/center-biospecimen-research-development>

No alerts have been found for Monoclonal Anti-Actin, ?-Smooth Muscle.

Data and Source Information

Source: [Antibody Registry](#)

Usage and Citation Metrics

We found 265 mentions in open access literature.

Listed below are recent publications. The full list is available at [NIF](#) .

Jiang X, et al. (2026) USP20-Driven Cholesterol Metabolism Links Inflammatory Signaling to Malignancy and Stromal Coevolution in Pancreatic Cancer. Cancer research, 86(3), 712.

Fabyan WB, et al. (2026) 3D reconstruction of human liver tissue at cellular resolution. Science advances, 12(8), eadz2299.

Wrynn T, et al. (2026) Unveiling critical signaling pathways in the murine salivary gland and the role of midkine. iScience, 29(3), 114852.

Tanaka LY, et al. (2026) A mechanism for the disrupted redox regulation of vascular contractility during aging. iScience, 29(1), 114264.

Anders M, et al. (2026) Generation of pluripotent stem cell line (IPWi001-A) and a corresponding CRISPR/Cas9 modified isogenic rescue control (IPWi001-A-1) from a patient with arrhythmia-induced cardiomyopathy harboring a KCNQ1 truncating mutation. Stem cell research, 92, 103921.

Garczyk M, et al. (2026) Targeting PI3K γ suppresses pancreatic cancer by dual disruption of fibrosis and immune evasion. Cell reports, 45(4), 117188.

Hopkins TIR, et al. (2026) Androgen dysregulates the follicular extracellular matrix and increases pro-fibrotic gene expression in the mouse ovary. *Scientific reports*, 16(1).

Yamaguchi H, et al. (2026) Krüppel-like factor 2 regulates renin expression in mature juxtaglomerular cells. *American journal of physiology. Renal physiology*, 330(4), F410.

Fukugaki A, et al. (2026) Enhancing Immunotherapeutic Response in Colorectal Cancer with a Neuropilin 1-Targeting Tumor-Penetrating Peptide. *Cancer research communications*, 6(6), 1364.

Birnhuber A, et al. (2025) Pulmonary vascular remodeling in Fra-2 transgenic mice is driven by type 2 inflammation and accompanied by pulmonary vascular hyperresponsiveness. *American journal of physiology. Lung cellular and molecular physiology*, 328(3), L413.

Zawieja SD, et al. (2025) Cellular characterization of the mouse collecting lymphatic vessels reveals that lymphatic muscle cells are the innate pacemaker cells. *eLife*, 12.

Parkington HC, et al. (2025) Contribution of chloride channels to the action potential and contraction in human myometrium during labour. *British journal of pharmacology*.

Miao Y, et al. (2025) Co-development of mesoderm and endoderm enables organotypic vascularization in lung and gut organoids. *Cell*, 188(16), 4295.

Hara D, et al. (2025) Targeting MLL1/WDR5-Mediated Epigenetic Regulation Mitigates Peritoneal Fibrosis by Reducing p16INK4a. *FASEB journal : official publication of the Federation of American Societies for Experimental Biology*, 39(8), e70543.

Van Hove H, et al. (2025) Interleukin-34-dependent perivascular macrophages promote vascular function in the brain. *Immunity*, 58(5), 1289.

Velazquez-Rivera E, et al. (2025) Specific targeting of brain endothelial cells using enhancer AAV vectors. *Neuron*, 113(10), 1562.

Camões Dos Santos J, et al. (2025) Generation of two pairs of induced pluripotent stem cells from Angelman syndrome patients with class I 15q11.2-q13.1 deletions and their unaffected familial controls. *Stem cell research*, 86, 103741.

Steinberg DJ, et al. (2025) Generation of human induced pluripotent stem cell lines HUJli004 and HUJli005 from two individuals carrying autosomal-dominant mutations in the CTNBB1 gene resulting in CTNBB1 neurodevelopmental disorder. *Stem cell research*, 83, 103667.

Fan C, et al. (2025) Targeting lysozyme 2 in endocardium promotes rapid recovery by modulating remote injury signals. *Cell stem cell*, 32(10), 1563.

Guo J, et al. (2025) KMT2C deficiency drives transdifferentiation of double-negative prostate cancer and confer resistance to AR-targeted therapy. *Cancer cell*, 43(7), 1261.