

## Monoclonal Antibody to ACTA2 / aortic smooth muscle Actin - Purified

<b>Alternate names:</b>	ACTSA, ACTVS, Alpha-actin-2, Cell growth-inhibiting gene 46 protein
<b>Catalog No.:</b>	AM11086PU-S
<b>Quantity:</b>	0.1 ml
<b>Concentration:</b>	0.2 mg/ml (lot specific)
<b>Background:</b>	Actin is a major component of the cytoskeleton and is present in every cell type. Actin can be resolved on the basis of its isoelectric points into three distinctive components: alpha, beta and gamma in order of increasing isoelectric point. Smooth Muscle Actin Ab does not stain cardiac or skeletal muscle. However, it will stain myofibroblasts and myoepithelial cells. This antibody could be used together with Muscle Specific Actin to distinguish leiomyosarcoma from rhabdomyosarcoma.
<b>Uniprot ID:</b>	<a href="#">P62736</a>
<b>NCBI:</b>	<a href="#">9606</a>
<b>GeneID:</b>	<a href="#">59</a>
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Recommended Isotype Controls:</b>	SM10P (for use in human samples), SM20P (for use in rat samples), AM03095PU-N
<b>Clone:</b>	1A4
<b>Immunogen:</b>	Synthetic peptide from N-terminus of Human alpha smooth muscle isoform of Actin. <b>Epitope:</b> Not determined.
<b>Format:</b>	<b>State:</b> Liquid purified IgG fraction <b>Purification:</b> Protein A Chromatography <b>Buffer System:</b> PBS, pH 7.6 with 1% BSA as stabilizer and 0.09% Sodium Azide as preservative
<b>Applications:</b>	<b>Immunohistochemistry with Formalin-Fixed, Paraffin-Embedded tissues:</b> 1/200. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min. Slides must be washed in between steps. Rinse slides with PBS/0.05% Tween. <b>Incubation Time:</b> 30 minutes at RT. <b>Positive Control:</b> Smooth Muscle or leiomyoma. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Molecular Weight:</b>	42kDa
<b>Specificity:</b>	This antibody stains smooth muscle cells in vessel walls, gut wall, and myometrium. Myoepithelial cells in breast and salivary gland are also stained. It reacts with tumors

arising from smooth muscles and myoepithelial cells. Actin from fibroblasts (beta- and gamma-cytoplasmic), striated muscle (alpha-sarcomeric), and myocardium (alpha-myocardial) are not labeled.

**Cellular Localization:** Cytoplasm.

**Species Reactivity:** Tested: Human.

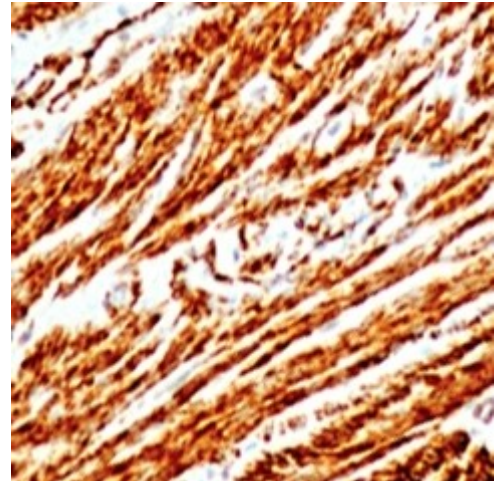
**Expected from sequence similarity:** Baboon, Bovine, Chicken, Rabbit, Mouse, Rat.

**Storage:** Store the antibody undiluted at 2-8°C.

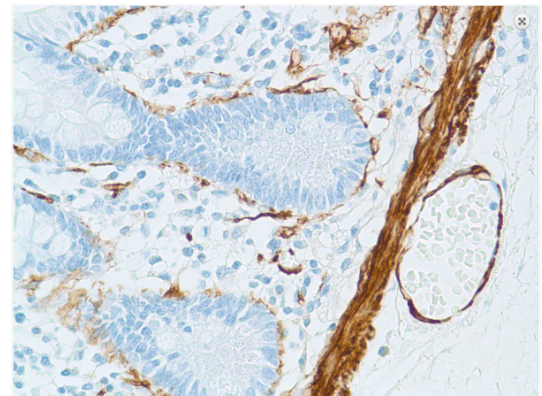
**DO NOT FREEZE!**

Shelf life: one year from despatch.

**Pictures:** Human leiomyosarcoma stained with anti-Actin antibody



Human Small Intestine stained with anti-Actin antibody



Human Smooth Muscle stained with anti-Actin antibody

