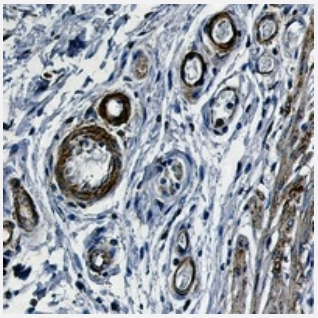
RecomAb™ Sm Size

# ACTA2 recombinant monoclonal antibody

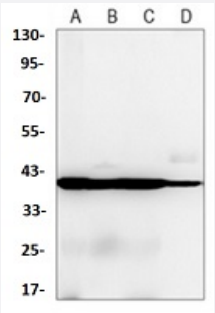
Catalog # RAB09136 Size 50 uL

## Applications



### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of human colon cancer formalin fixed paraffin embedded tissue section using Smooth Muscle Actin recombinant monoclonal antibody (Cat # RAB09136). The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.53). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.




### Western Blot

Western blot analysis of rat brain (A), C6 (B), NIH3T3 (C), Hela (D) whole cell lysates with Smooth Muscle Actin recombinant monoclonal antibody (Cat # RAB09136).

## Specification

| | |
|---|---|
| **Product Description** | Rabbit recombinant monoclonal antibody raised against human ACTA2. |
| **Antibody Species** | Rabbit |
| **Immunogen** | Original antibody is raised against a synthetic peptide of human alpha smooth muscle Actin. |
| **Theoretical MW (kDa)** | 42 |
| **Reactivity** | Human, Mouse, Rat |

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| | |
|---|---|
| **Specificity** | Recognizes endogenous levels of Smooth Muscle Actin protein. |
| **Form** | Liquid |
| **Preparation Method** | Mammalian cell (HEK293) expression system |
| **Purification** | Immunogen affinity chromatography |
| **Isotype** | IgG |
| **Recommend Usage** | Immunohistochemistry (1:50-1:100)<br>Western Blot (1:500-1:1000)<br>The optimal working dilution should be determined by the end user. |
| **Storage Buffer** | In 50mM Tris-Glycine, pH 7.4 (0.15M NaCl, 50% Glycerol, 0.01% Sodium azide and 0.05% BSA) |
| **Storage Instruction** | Store at 4°C short term.<br>Aliquot and store at -20°C long term.<br>Avoid freeze-thaw cycles. |
| **Note** | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only. |

## Applications

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- Western Blot

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## Gene Info — ACTA2

| | |
|---|---|
| **Entrez GeneID** | 59 |
| **Protein Accession#** | P62736 |
| **Gene Name** | ACTA2 |
| **Gene Alias** | AAT6, ACTSA |

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| | |
|---|---|
| **Gene Description** | actin, alpha 2, smooth muscle, aorta |
| **Omim ID** | 102620 |
| **Gene Ontology** | Hyperlink |
| **Gene Summary** | The protein encoded by this gene belongs to the actin family of proteins, which are highly conserved proteins that play a role in cell motility, structure and integrity. Alpha, beta and gamma actin isoforms have been identified, with alpha actins being a major constituent of the contractile apparatus, while beta and gamma actins are involved in the regulation of cell motility. This actin is an alpha actin that is found in skeletal muscle. Defects in this gene cause aortic aneurysm familial thoracic type 6. Multiple alternatively spliced variants, encoding the same protein, have been identified. [provided by RefSeq |
| **Other Designations** | OTTHUMP00000020042\|alpha 2 actin\|alpha-cardiac actin\|growth-inhibiting gene 46 |

## Pathway

- Vascular smooth muscle contraction

## Disease

- Alzheimer Disease
- Cardiovascular Diseases
- Diabetes Mellitus
- Edema
- Genetic Predisposition to Disease

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