**alpha smooth muscle actin Monoclonal Antibody**

<table>
<thead>
<tr>
<th>Catalog No.</th>
<th>A11111</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applications</strong></td>
<td>WB, IHC, ICC, IF, FC</td>
</tr>
<tr>
<td><strong>Cross-reactivity</strong></td>
<td>Human, Mouse, Rat</td>
</tr>
<tr>
<td><strong>Category</strong></td>
<td>Monoclonal Antibodies</td>
</tr>
<tr>
<td><strong>Observed MW</strong></td>
<td>42kDa</td>
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<tr>
<td><strong>Calculated MW</strong></td>
<td>42kDa</td>
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</tbody>
</table>

**Immunogen Information**

- **Immunogen**: Recombinant protein of human alpha smooth muscle actin
- **Gene ID**: 59
- **Swiss prot**: P62736
- **Synonyms**: ACTA2; AAT6; ACTSA; MYMY5; actin, aortic smooth muscle

**Product Information**

- **Source**: Rabbit
- **Isotype**: IgG
- **Purification method**: Affinity purification
- **Storage**: Store at -20°C. Avoid freeze / thaw cycles.
  
  Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH 7.3.

**Background**

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.

**Recommended Dilutions**

- **WB**: 1:500 - 1:2000
- **IHC**: 1:50 - 1:200
- **ICC**: 1:50 - 1:200
- **IF**: 1:50 - 1:200
- **FC**: 1:20 - 1:50

**Western blot analysis of extracts of various cell lines, using alpha smooth muscle actin antibody (A11111).**

- Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
- Lysates/proteins: 25ug per lane.
- Blocking buffer: 3% nonfat dry milk in TBST.

**Immunohistochemistry of paraffin-embedded human tonsil using alpha smooth muscle actin antibody (A11111) at dilution of 1:100 (40x lens).**

**Immunohistochemistry of paraffin-embedded human liver using alpha smooth muscle actin antibody (A11111) at dilution of 1:100 (40x lens).**

**Immunohistochemistry of paraffin-embedded mouse skin using alpha smooth muscle actin antibody (A11111) at dilution of 1:100 (40x lens).**
Immunohistochemistry of paraffin-embedded human lung using alpha smooth muscle actin antibody (A11111) at dilution of 1:100 (40x lens).

Immunohistochemistry of paraffin-embedded mouse intestin using alpha smooth muscle actin antibody (A11111) at dilution of 1:100 (40x lens).