

Rabbit anti-Human Alpha Smooth Muscle Actin Monoclonal Antibody | anti-ACTA2 antibody

Anti - Alpha Smooth Muscle Actin

CATALOG # AAA79010	HOST Rabbit	REACTIVITY Human	APPLICATIONS Immunohistochemistry
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PRODUCT SYNONYMS

Alpha Smooth Muscle Actin; Monoclonal Antibody; Anti - Alpha Smooth Muscle Actin; anti-ACTA2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Monoclonal
Clone Number	M16-L
Specificity	Human, mouse
Sequence Length	377
Applicable Applications for anti-ACTA2 antibody	IHC (Immunohistochemistry)
Immunogen	Peptide derived from the N-terminal sequence of human alpha smooth muscle actin. Antibody recognizes the epitope between Glu3 - Gly16.
Cellular localization	cytoplasm, cytoskeleton
Positive control	tumors arising from smooth muscles and myoepithelial cells
Storage Buffer	20 mM Tris-HCl, pH 8.0
Stabilizer	20 mg/ml BSA
Preservative	0.05% NaN3

IHC-P Protocol - Instruction Manual

1. Deparaffinize the section in 3 changes of xylene, 10 minutes each.
2. Wash the section in 96%, 80% and 70% ethyl alcohol for 10 minutes each.
3. Rinse in distilled water, 2 x 5 minutes.
4. Block the endogenous peroxidase by incubating the tissue in 3% hydrogen peroxide (H₂O₂) for 10 minutes.
5. Wash in distilled water, 2 x 5 minutes.
6. For antigen retrieval: Immerse the slide in Tris-EDTA buffer, pH 9.0* and incubate at 95-97°C in water bath for 20 minutes.
7. Remove the staining to room temperature and let the slide to cool (in Tris-EDTA buffer, pH 9.0) for 15 minutes.
8. Rinse in distilled water, 2 x 5 minutes.
9. Wash in PBS (phosphate buffer saline, pH 7.0-7.5) supplemented with 0.05% of Tween-20 (buffer A), 2 x 5 minutes
10. **CONCENTRATED:**
Incubate the section with primary antibody at the dilution 1:100 – 1:200 for 1 hour in the closed wet chamber.
- READY TO USE (RTU):**
Incubate the section with primary antibody (ready to use) for 1 hour in a closed wet chamber.
11. Wash 3 x 5 minutes with buffer A.
12. Apply the secondary antibody (the protocol depends on the supplier), and proceed to standard immunohistochemistry protocol (HRP - Peroxide - DAB). Micropolymer-HRP detection kit rabbit/mouse dual is suggested.
13. Wash 3 x 5 minutes with buffer A.
14. Apply the chromogen (DAB), 1 - 3 minutes.
15. Wash in water, 2 x 5 minutes.
16. Stain in hematoxylin for 5 minutes.
17. Wash in distilled water, 3 x 2 minutes.
18. Mount the slide for observation.

* Tris-EDTA Buffer (10mM Tris Base, 1mM EDTA solution, 0.05% Tween-20, pH 9.0):

Tris ----- 1.21 g; EDTA ----- 0.37 g; Distilled water ----- 1000 ml

Mix to dissolve in 700 ml of distilled water. Adjust pH to 9.0 with 1M HCl and then add 0.5 ml of Tween-20 and mix well. Adjust the final volume to 1 liter with distilled water.

Store this solution at room temperature for 3 months or at +4°C for longer storage.

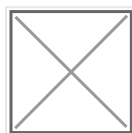
Precautions

1. We strongly recommend to use the Primary Antibody Diluent (catalog number: Please inquire), eventually alternative diluent (containing protease free BSA at the concentrations > = 1mg/ml) for dilution of concentrated antibodies, otherwise the warranty might be voided.
2. Centrifuge the vial before use.
3. Intended for research use.
4. Do not use after expiration date stamped on vial label.
5. Avoid contamination of the reagent.
6. Any discrepancies in the recommended procedures stated in the working protocol may affect the final results.
7. The reagent contains sodium azide (NaN₃) which is highly toxic in higher concentrations. The concentration in the reagent (0.05%) is not considered as hazardous.
8. Disposal of waste material must be conducted in accordance with local regulations.
9. Wear appropriate Personal Protective Equipment to avoid contact with eyes and skin.

Preparation and Storage

Store at +4 degree C.

IMAGES



IHC (Immunohistochemistry)

Alpha smooth muscle actin positivity in the vessel walls of submucosa of small intestine tissue.
Formalin fixed, paraffin embedded human tissue (4 µm section) stained with AAA79010
monospecific antibody according to related datasheet.

NCBI AND UNIPROT INFORMATION

NCBI GI

51316972

NCBI GeneID	59
UniProt Accession #	P62736; P03996; P04108; Q6FI19; B2R8A4
NCBI Official Full Name	Actin, aortic smooth muscle
NCBI Official Synonym Full Names	actin, alpha 2, smooth muscle, aorta
NCBI Official Symbol	ACTA2
NCBI Official Synonym Symbols	AAT6; ACTSA; MYMY5
NCBI Protein Information	actin, aortic smooth muscle; alpha-cardiac actin; cell growth-inhibiting gene 46 protein
UniProt Protein Name	Actin, aortic smooth muscle
UniProt Gene Name	ACTA2
UniProt Synonym Gene Names	ACTSA; ACTVS
UniProt Entry Name	ACTA_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/alpha-smooth-muscle-actin-antibody-clone-m16-l-immunohistochemistry-elisa/79010>