

Anti-ACTA2 Polyclonal Antibody 2

Product Details

Ig Type:	IgG
Reactivity:	Human,Mouse,Rat (predicted:Rabbit,Dog)
Molecular Weight:	Theoretical: 42 kDa. Actual: 42 kDa.
Purification:	Protein A purified

Applications

Verified Activity:

1. Paraformaldehyde-fixed, paraffin embedded (Human stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (alpha smooth muscle Actin) Polyclonal Antibody, Unconjugated (TMAB-00048) at 1:200 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining.
2. Paraformaldehyde-fixed, paraffin embedded (rat stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (alpha smooth muscle Actin) Polyclonal Antibody, Unconjugated (TMAB-00048) at 1:200 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining.
3. Paraformaldehyde-fixed, paraffin embedded (rat colon); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (alpha smooth muscle Actin) Polyclonal Antibody, Unconjugated (TMAB-00048) at 1:200 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining.
4. Paraformaldehyde-fixed, paraffin embedded (human cervical carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (alpha smooth muscle Actin) Polyclonal Antibody, Unconjugated (TMAB-00048) at 1:200 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining.
5. Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (alpha smooth muscle Actin) Polyclonal Antibody, Unconjugated (TMAB-00048) at 1:200 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining.
6. Paraformaldehyde-fixed, paraffin embedded (Human duodenum); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (alpha smooth muscle Actin) Polyclonal Antibody, Unconjugated (TMAB-00048) at 1:200 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining.
7. Paraformaldehyde-fixed, paraffin embedded (mouse stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (alpha smooth muscle Actin) Polyclonal Antibody, Unconjugated (TMAB-00048) at 1:200 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining.

peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (alpha smooth muscle Actin) Polyclonal Antibody, Unconjugated (TMAB-00048) at 1:200 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining.

8. Blank control (blue line): HeLa (fixed with 70% ethanol (Overnight at 4°C) and then permeabilized with 90% ice-cold methanol for 30 min on ice).

Primary Antibody (green line): Rabbit Anti-alpha smooth muscle Actin antibody (TMAB-00048), Dilution: 1 µg/10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG.

Secondary Antibody (white blue line): Goat anti-rabbit IgG-FITC, Dilution: 1 µg/test.

9. Blank control: NIH/3T3. Primary Antibody (green line): Rabbit Anti-alpha smooth muscle Actin antibody (TMAB-00048)

Dilution: 1 µg/10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG.

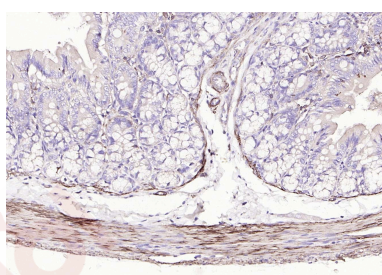
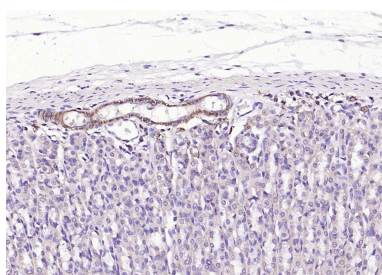
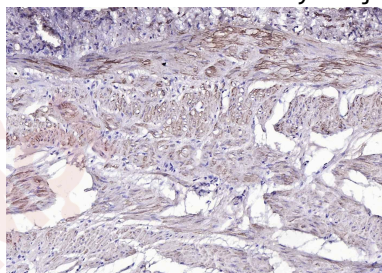
Secondary Antibody: Goat anti-rabbit IgG-AF488

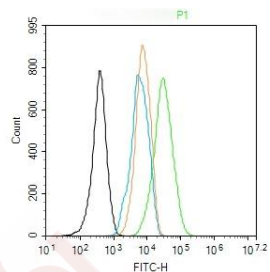
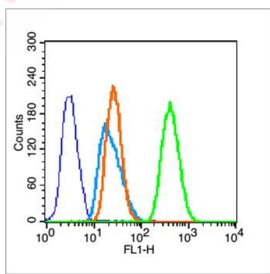
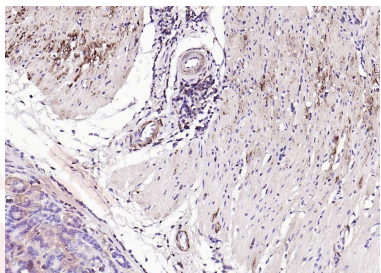
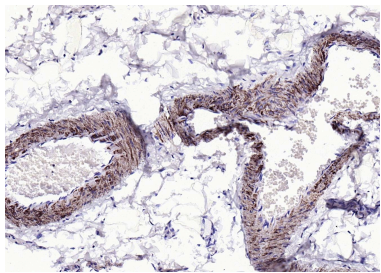
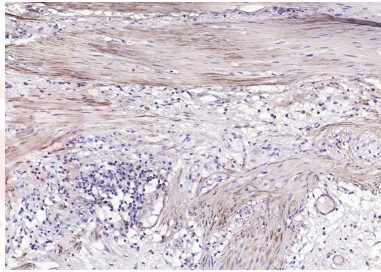
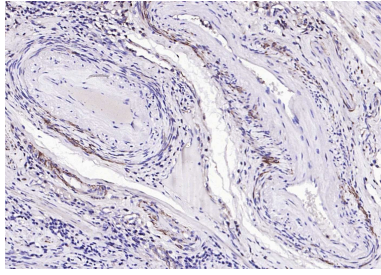
Dilution: 1 µg/test.

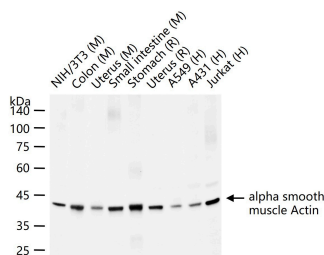
Protocol

The cells were fixed with 4% PFA (10 min at room temperature) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature.

10. 25 µg total protein per Lane of various lysates probed with alpha smooth muscle Actin polyclonal antibody, unconjugated (TMAB-00048) at 1:2000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at RT for 60 min.







Application: FCM,IF,IHC-Fr,IHC-P,WB

Recommended FCM=1 µg/Test; IF=1:200-800; IHC-Fr=1:200-800; IHC-P=1:200-800; WB=1:2000-10000

Properties

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

Antigen Details

Immunogen: KLH conjugated synthetic peptide: human Actin alpha

Antigen Species: Human

Gene ID: 59

Uniprot ID: P62736

Synonyms: Actin, aortic smooth muscle;ACTSA;ACTA2;Cell growth-inhibiting gene 46 protein;aortic smooth muscle;ACTVS;Alpha-actin-2

Biology Area: Myogenesis,Mesoderm,Actin,alpha smooth muscle Actin,Mesoderm,Arterial,Cytoskeleton, Actins,Smooth Muscle Cells

Research Background

All eukaryotic cells express Actin, which often constitutes as much as 50% of total cellular protein. Actin filaments can form both stable and labile structures and are crucial components of microvilli and the contractile apparatus of muscle cells. While lower eukaryotes, such as yeast, have only one Actin gene, higher eukaryotes have several isoforms encoded by a family of genes. At least six types of Actin are present in mammalian tissues and fall into three classes. alpha-Actin expression is limited to various types of muscle, whereas beta- and gamma-Actin are the principle constituents of filaments in other tissues. Members of the small GTPase family regulate the organization of the Actin cytoskeleton. Rho controls the assembly of Actin stress fibers and focal adhesion. Rac regulates Actin filament accumulation at the plasma membrane. Cdc42 stimulates formation of filopodia.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481