abcam

Product datasheet

Anti-alpha smooth muscle Actin antibody ab21027

★★★★★ 23 Abreviews 138 References 2 Images

Overview

Product name Anti-alpha smooth muscle Actin antibody

Description Goat polyclonal to alpha smooth muscle Actin

Host species Goat

Tested applications Suitable for: WB

Species reactivity Reacts with: Mouse, Rat, Human

Predicted to work with: Dog, Pig 4

Immunogen Synthetic peptide corresponding to Human alpha smooth muscle Actin aa 1-100 (N terminal).

Database link: P62736

Run BLAST with
Run BLAST with

Positive control WB: Human and rat duodenum lysate. HeLa and NIH/3T3 whole cell lysate.

General notesThe Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

Storage buffer pH: 7.30

Preservative: 0.02% Sodium azide

Constituents: 99% Tris buffered saline, 0.5% BSA

Purity Immunogen affinity purified

Purification notes Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity

chromatography using the immunizing peptide.

Clonality Polyclonal

1

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab21027 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|-------------|------------------|---|
| WB | ★★★★☆ (2) | Use a concentration of 0.1 - 1 µg/ml. Detects a band of approximately 45 kDa (predicted molecular weight: 42 kDa). A 1 hour primary incubation at room temperature is recommended for this product. |

Target

| Function | Actins are highly conserved proteins that are involved in various types of cell motility and are |
|----------|--|
|----------|--|

ubiquitously expressed in all eukaryotic cells.

Involvement in disease Defects in ACTA2 are the cause of aortic aneurysm familial thoracic type 6 (AAT6) [MIM:611788].

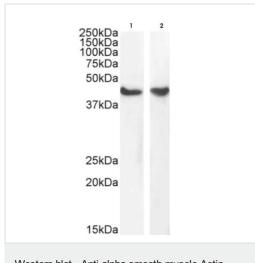
AATs are characterized by permanent dilation of the thoracic aorta usually due to degenerative changes in the aortic wall. They are primarily associated with a characteristic histologic appearance known as 'medial necrosis' or 'Erdheim cystic medial necrosis' in which there is degeneration and fragmentation of elastic fibers, loss of smooth muscle cells, and an

accumulation of basophilic ground substance.

Sequence similarities Belongs to the actin family.

Cellular localization Cytoplasm > cytoskeleton.

Images



Western blot - Anti-alpha smooth muscle Actin antibody (ab21027)

All lanes : Anti-alpha smooth muscle Actin antibody (ab21027) at 1 $\mu g/ml$

Lane 1 : HeLa (Human epithelial cell line from cervix

adenocarcinoma) whole cell lysate

Lane 2: NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell

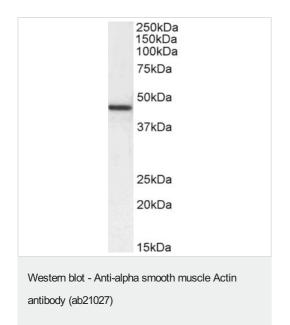
lysate

Lysates/proteins at 35 µg per lane.

Predicted band size: 42 kDa

Lysates in RIPA buffer.

Detected by chemiluminescence.



Anti-alpha smooth muscle Actin antibody (ab21027) at 1 μ g/ml + Rat Duodenum lysate at 35 μ g

Predicted band size: 42 kDa

Detected by chemiluminescence.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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