

BOSTER BIOLOGICAL TECHNOLOGY, LTD.

3942 B Valley Ave, Pleasanton, CA, 94566 Phone: 925-485-4527. 888-466-3604 Fax: 925-485-4560

www.bosterbio.com

Certificate of Analysis

Note: this is a sample COA. To get the COA for your lot #, please contact us at support@bosterbio.com

To whom it may concern,

This letter attests that Anti-Alpha-Smooth Muscle Actin Antibody (Monoclonal, 1A4) , catalog # MA1106, is manufactured by Boster Biological Technology., Ltd, through test and assay, we got the following data:

1. Immunogen

N-terminal synthetic decapeptide of alpha-smooth muscle actin.

2. Application Data

Applications Details

Immunohistochemistry(Paraffin-embedded Section), 0.1-0.5µg/ml, Human, mouse, rat, By Heat
Immunohistochemistry(Frozen Section), 0.1-0.5µg/ml, Human, mouse, rat, -
Western blot, 2µg/ml, Human, mouse, rat

3. Cross Reaction

No cross reactivity with other proteins

4. Image

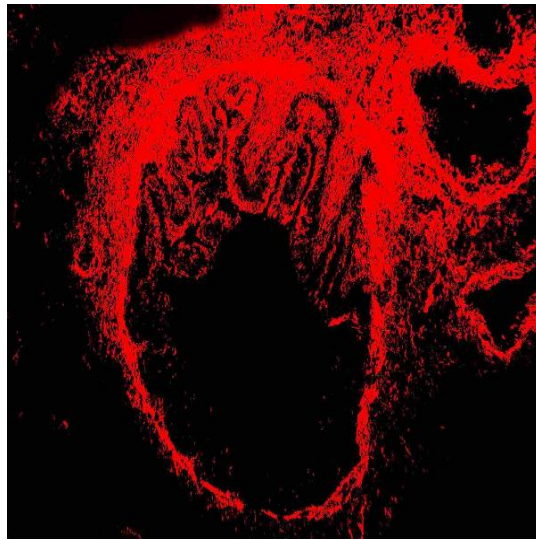


Figure 1. IHC analysis of Alpha-Smooth Muscle Actin using anti- Alpha-Smooth Muscle Actin antibody (MA1106).

Alpha-Smooth Muscle Actin was detected in paraffin-embedded section of rat cardiac muscle tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 $\frac{1}{4}$ g/ml mouse anti- Alpha-Smooth Muscle Actin Antibody (MA1106) overnight at 4 ^\circ C. Biotinylated goat anti- mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 ^\circ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1072) with DAB as the chromogen.

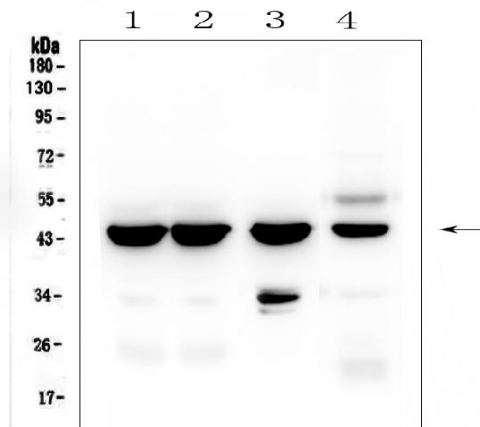


Figure 2. Western blot analysis of Alpha-Smooth Muscle Actin using anti- Alpha-Smooth Muscle Actin antibody (MA1106).

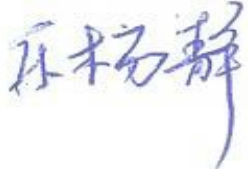
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

- Lane 1: human placenta tissue lysates,
- Lane 2: human placenta tissue lysates,
- Lane 3: rat stomach tissue lysates,
- Lane 4: mouse stomach tissue lysates.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti- Alpha-Smooth Muscle Actin antigen affinity purified monoclonal antibody (Catalog # MA1106) at 0.5 $\frac{1}{4}$ g/mL overnight at 4 ^\circ C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti- mouse IgG-HRP secondary antibody at a dilution of

1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Alpha-Smooth Muscle Actin at approximately 43KD. The expected band size for Alpha-Smooth Muscle Actin is at 43KD.

Approved by:

A handwritten signature in blue ink, appearing to be '岳杨静' (Yue Yangjing).

Ms. Yangjing Yue Chief technician

Quality Control System of ELISA

Date: May 13, 2016