

# $\alpha$ -Actin-1 ( $\alpha$ -SMA) Rabbit mAb

Catalog No.: A29274 **Recombinant**

## Basic Information

### Observed MW

42 kDa

### Calculated MW

42 kDa

### Category

Primary antibody

### Applications

WB, IF-F, IHC-P, ELISA

### Cross-Reactivity

Human, Mouse, Rat, Chicken, Pig

### CloneNo number

ARC3966

## Background

The product 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. Mutations in this gene cause a variety of myopathies, including nemaline myopathy, congenital myopathy with excess of thin myofilaments, congenital myopathy with cores, and congenital myopathy with fiber-type disproportion, diseases that lead to muscle fiber defects with manifestations such as hypotonia.

## Recommended Dilutions

**WB** 1:4000 - 1:20000**IF-F** 1:200 - 1:800**IHC-P** 1:150 - 1:600

**ELISA** Recommended starting concentration is 1  $\mu$ g/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions ( $\geq 1:10000$ ) a sequential dilution method is strongly recommended to ensure measurement accuracy.

## Contact

 | 400-999-6126 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn)

## Immunogen Information

### Gene ID

58

### Swiss Prot

P68133

### Immunogen

This information is considered to be commercially sensitive.

### Synonyms

ACTA; ASMA; CFTD; MPFD; NEM1; NEM2; NEM3; SHPM; CFTD1; CFTDM; CMYO2A; CMYO2B; CMYO2C; CMYP2A; CMYP2B; CMYP2C

## Product Information

### Source

Rabbit

### Isotype

IgG

### Purification

Affinity purification

### Storage

Store at -20°C. Avoid freeze / thaw cycles.

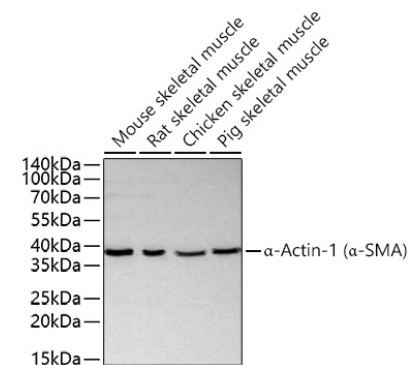
Buffer: PBS with 0.09% Sodium azide, 0.05% BSA, 50% glycerol, pH7.3.



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## Validation Data



Western blot analysis of various lysates using  $\alpha$ -Actin-1 ( $\alpha$ -SMA) Rabbit mAb (A29274) at 1:10000 dilution incubated overnight at 4°C.

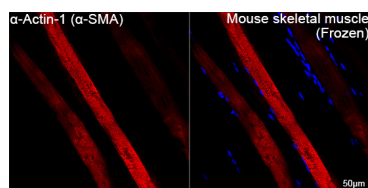
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25  $\mu$ g per lane.

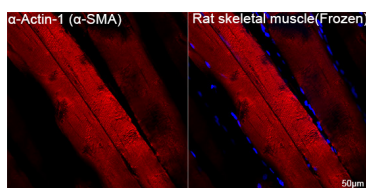
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

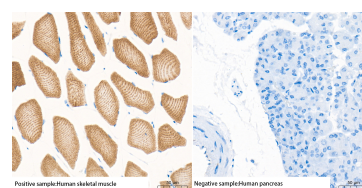
Exposure time: 5 s.



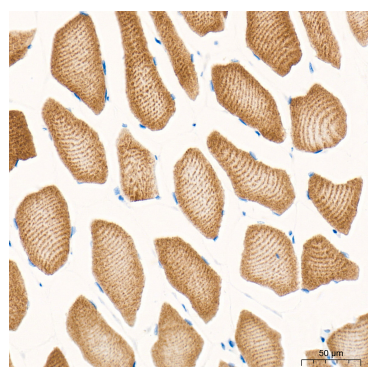
Confocal imaging of frozen sections of Mouse skeletal muscle tissue using  $\alpha$ -Actin-1 ( $\alpha$ -SMA) Rabbit mAb (A29274, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Microwave antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



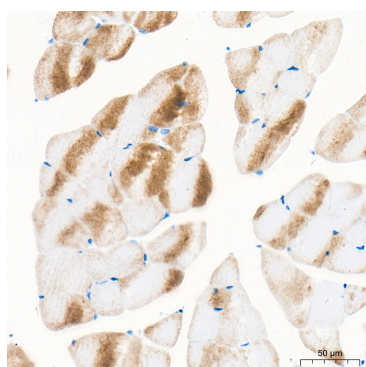
Confocal imaging of frozen sections of Rat skeletal muscle tissue using  $\alpha$ -Actin-1 ( $\alpha$ -SMA) Rabbit mAb (A29274, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Microwave antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



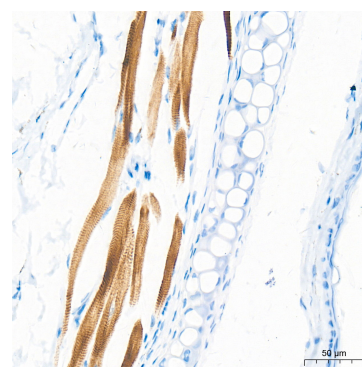
Immunohistochemistry analysis of paraffin-embedded Human skeletal muscle tissue (left, Positive control) and Human pancreas tissue (right, Negative control), using  $\alpha$ -Actin-1 ( $\alpha$ -SMA) Rabbit mAb (A29274) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human skeletal muscle tissue using  $\alpha$ -Actin-1 ( $\alpha$ -SMA) Rabbit mAb (A29274) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



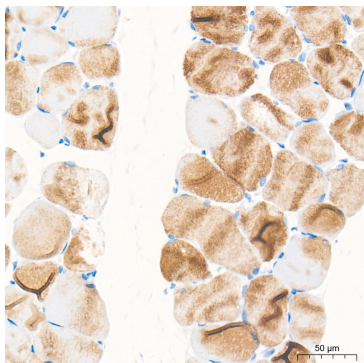
Immunohistochemistry analysis of paraffin-embedded Mouse skeletal muscle tissue using  $\alpha$ -Actin-1 ( $\alpha$ -SMA) Rabbit mAb (A29274) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse skin tissue using  $\alpha$ -Actin-1 ( $\alpha$ -SMA) Rabbit mAb (A29274) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

## Validation Data

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Immunohistochemistry analysis of paraffin-embedded Rat skeletal muscle tissue using  $\alpha$ -Actin-1 ( $\alpha$ -SMA) Rabbit mAb (A29274) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.