

#### DESCRIPTION

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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human/Mouse/Rat                                                                                      |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human, mouse and rat $\alpha$ -Actinin 1 in Western blots.                                   |
| <b>Source</b>                                                                                                                                                                                           | Polyclonal Goat IgG                                                                                  |
| <b>Purification</b>                                                                                                                                                                                     | Antigen Affinity-purified                                                                            |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human $\alpha$ -Actinin 1<br>Asp272-Thr500<br>Accession # P12814 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 405<br>Excitation Wavelength: 405 nm<br>Emission Wavelength: 421 nm                      |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                                         |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                                      |

#### APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

|                            |                                                                        |
|----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>        | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunocytochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

#### PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

#### BACKGROUND

Alpha-Actinin 1 (ACTN1) is a member of the spectrin superfamily with a predicted molecular weight of approximately 100 kDa. It is 892 amino acids in length and shares 99% aa identity with mouse and rat ACTN1. Multiple splice forms exist, resulting in 4 distinct isoforms with different tissue expression patterns. ACTN1 binds to F-actin as well as other cytoskeletal and signaling proteins and plays an important role in both cell motility and muscle contraction.

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