

DESCRIPTION

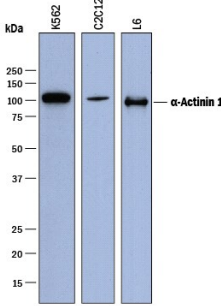
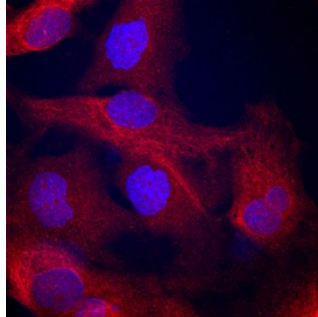
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse and rat α -Actinin 1 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human α -Actinin 1 Asp272-Thr500 Accession # P12814
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	0.5 μ g/mL	See Below
Immunocytochemistry	5-15 μ g/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human, Mouse, and Rat α-Actinin 1 by Western Blot.</p> <p>Western blot shows lysates of K562 human chronic myelogenous leukemia cell line, C2C12 mouse myoblast cell line, and L6 rat myoblast cell line. PVDF membrane was probed with 0.5 μg/mL of Goat Anti-Human/Mouse/Rat α-Actinin 1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8279) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for α-Actinin 1 at approximately 100-105 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunocytochemistry</p>  <p>α-Actinin 1 in A172 Human Cell Line.</p> <p>α-Actinin 1 was detected in immersion fixed A172 human glioblastoma cell line using Goat Anti-Human/Mouse/Rat α-Actinin 1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8279) at 10 μg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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.