

# Actin polyclonal antibody

Actin is one of the major proteins (~42 kDa) of the cytoskeleton. It regulates contractile potential in muscle tissues and helps to control the shape as well as the motility of non-muscle cells. Actin is expressed in all eukaryotic cells which makes it a useful loading control in Western blotting experiments. In higher eukaryotes, there are six isoforms of actin: Three alpha-actins ( $\alpha$ -skeletal,  $\alpha$ -cardiac,  $\alpha$ -smooth muscle), one  $\beta$ -actin ( $\beta$ -non-muscle) and two  $\gamma$ -actins ( $\gamma$ -smooth muscle and  $\gamma$ -non-muscle). Actin isoforms show >90% overall sequence homology.

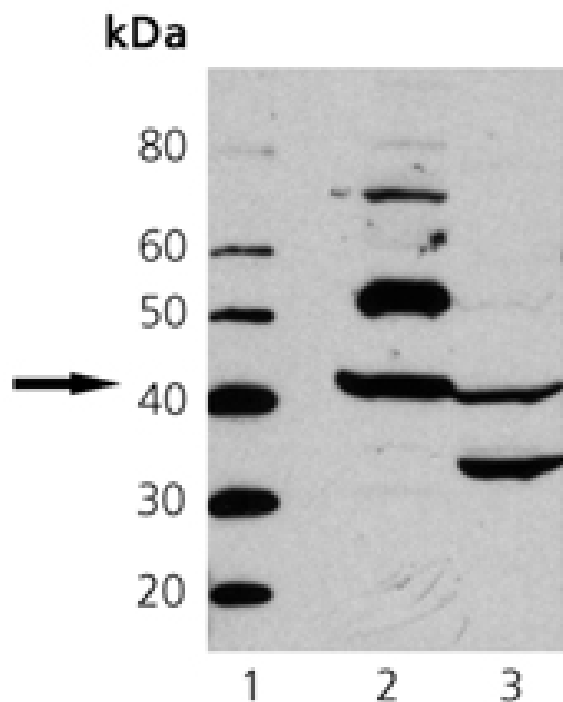
This antibody is covered by our [Worry-Free Guarantee](#).

Citations: 4

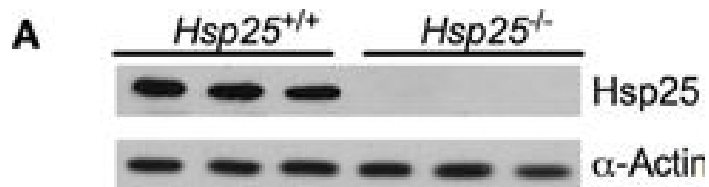
[View Online »](#)

Manuals, SDS & CofA

[View Online »](#)



Western Blot Analysis of Actin pAb: Lane 1: MWM, Lane 2: Mouse Heart Tissue Extract, Lane 3: Chicken Heart Tissue Extract.



(A) Gastrocnemius muscle HSP25 and actin protein levels in Hsp25<sup>+/+</sup> and Hsp25<sup>-/-</sup> mice verifying the absence of HSP25. (B) HSP25 protein levels in young and old Hsp25<sup>+/+</sup> mice under sedentary conditions or following 14 days of running wheel activity.

#Significantly different from sedentary ( $P < 0.0001$ ), †significant main effect of age ( $P < 0.0001$ ).

Representative western blot showing HSP25 in sedentary and running wheel young and old Hsp25<sup>+/+</sup> mice. Data are presented as means  $\pm$  SE,  $n = 8$  for all groups.

Image collected and cropped by CiteAb under a CC-BY license from the following publication: Effect of HSP25 loss on muscle contractile function and running wheel activity in young and old mice. *Front Physiol* (2014)

## Handling & Storage

Long Term Storage -20°C

Shipping Blue Ice

**Regulatory Status** RUO - Research Use Only

## Product Details

**Alternative Name** ACTA, ACTSA

**Application** WB

**Application Notes** Detects a band of ~42kDa by Western blot.

**Formulation** Liquid. In PBS, pH 7.2, containing 0.09% sodium azide and 50% glycerol.

**Host** Rabbit

**Immunogen** Bovine skeletal muscle Actin.

**Purity Detail** Protein A affinity purified.

**Recommendation Dilutions/Conditions** Western Blot (1:1,000, ECL) Suggested dilutions/conditions may not be available for all applications. Optimal conditions must be determined individually for each application.

**Source** Purified from rabbit serum.

**Species Reactivity** Bovine, Chicken, Dog, Guinea pig, Hamster, Human, Monkey, Mouse, Porcine, Rabbit, Rat, Sheep, Xenopus

**UniProt ID** P68133

**Worry-free Guarantee** This antibody is covered by our [Worry-Free Guarantee](#)

 Last modified: May 29, 2024  
ENZO LIFE SCIENCES  
Phone: 800.942.0430  
[info-usa@enzolifesciences.com](mailto:info-usa@enzolifesciences.com)

European Sales Office  
ENZO LIFE SCIENCES  
(ELS) AG  
Phone: +41 61 926 8989  
[info-eu@enzolifesciences.com](mailto:info-eu@enzolifesciences.com)

Belgium, The Netherlands  
& Luxembourg  
Phone: +32 3 466 0420  
[info-fr@enzolifesciences.com](mailto:info-fr@enzolifesciences.com)

France  
Phone: +33 472 440 655  
[info-fr@enzolifesciences.com](mailto:info-fr@enzolifesciences.com)

Germany  
Phone: +49 7621 5500 526  
[info-de@enzolifesciences.com](mailto:info-de@enzolifesciences.com)

UK & Ireland  
Phone (UK customers):  
0845 601 1488  
Phone: +44 1392 825900  
[info-uk@enzolifesciences.com](mailto:info-uk@enzolifesciences.com)