

**ACTA1/ $\alpha$ -actin Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AW5098**

**Specification**

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**ACTA1/ $\alpha$ -actin Antibody (C-term) - Product Information**

Application	<b>WB, IHC,E</b>
Primary Accession	<a href="#">P68133</a>
Other Accession	<a href="#">P60010</a> , <a href="#">P68136</a> , <a href="#">P68135</a> , <a href="#">P68137</a> , <a href="#">P68134</a> , <a href="#">P68139</a> , <a href="#">P68138</a> , <a href="#">P63269</a> , <a href="#">P63268</a> , <a href="#">P63267</a> , <a href="#">P63270</a> , <a href="#">Q5E9B5</a> , <a href="#">A2BDB0</a> , <a href="#">P63259</a> , <a href="#">P63260</a> , <a href="#">P63261</a> , <a href="#">Q5ZMQ2</a> , <a href="#">P63258</a> , <a href="#">P04751</a> , <a href="#">P68035</a> , <a href="#">P68033</a> , <a href="#">P68032</a> , <a href="#">P68034</a> , <a href="#">Q3ZC07</a> , <a href="#">O93400</a> , <a href="#">P60711</a> , <a href="#">P29751</a> , <a href="#">O6QAO1</a> , <a href="#">P60710</a> , <a href="#">Q4R561</a> , <a href="#">P60709</a> , <a href="#">P48975</a>
Reactivity Predicted	<b>Human, Rat</b> <b>C.Elegans, Drosophila, Xenopus, Chicken,</b> <b>Bovine, Mouse, Rabbit, Zebrafish, Hamster,</b> <b>Horse, Monkey, Pig, Sheep, Yeast</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>H=42;M=42;Rat=42 KDa</b>
Isotype	<b>Rabbit IgG</b>
Antigen Source	<b>HUMAN</b>

**ACTA1/ $\alpha$ -actin Antibody (C-term) - Additional Information**

**Gene ID 58**

**Antigen Region**  
189-217

**Other Names**  
ACTA1; ACTA; Actin, alpha skeletal muscle; Alpha-actin-1

**Dilution**  
WB~~1:1000  
IHC~~1:25

**Target/Specificity**  
This ACTA1/Alpha-actin antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 189-217 amino acids from the C-terminal region of human ACTA1/Alpha-actin.

**Format**  
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**  
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small

aliquots to prevent freeze-thaw cycles.

### Precautions

ACTA1/ $\alpha$ -actin Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## ACTA1/ $\alpha$ -actin Antibody (C-term) - Protein Information

**Name** ACTA1

**Synonyms** ACTA

### Function

Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.

### Cellular Location

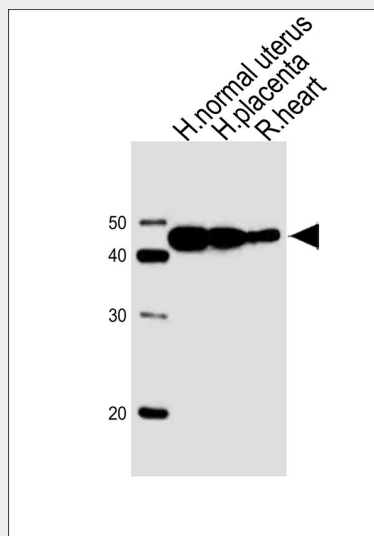
Cytoplasm, cytoskeleton.

## ACTA1/ $\alpha$ -actin Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

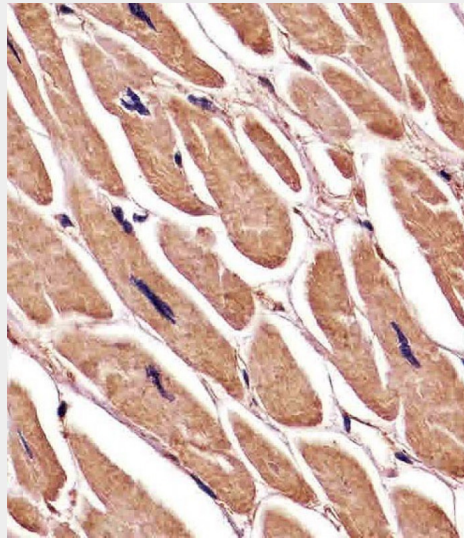
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## ACTA1/ $\alpha$ -actin Antibody (C-term) - Images



Western blot analysis of lysates from human normal uterus, human placenta, rat heart tissue

lysate (from left to right), using ACTA1/ $\alpha$ -actin (C-term)(Cat. #AW5098). AW5098 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.



AW5098 staining ACTA1/ $\alpha$ -actin in human heart tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

#### **ACTA1/ $\alpha$ -actin Antibody (C-term) - 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 nemaline myopathy type 3, 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.

#### **ACTA1/ $\alpha$ -actin Antibody (C-term) - References**

Kim, E.Y., et al. Am. J. Physiol. Renal Physiol. 299 (3), F594-F604 (2010) ; Haigh, S.E., et al. Neuromuscul. Disord. 20(6):363-374(2010) Yu, G., et al. J Clin Neurosci 17(6):766-769(2010) Yu, C.H., et al. PLoS ONE 5 (7), E11878 (2010) ; Licastro, F., et al. Curr. Pharm. Des. 16(7):783-788(2010)