

# ACTA1/α-actin Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5098

#### Specification

### ACTA1/α-actin Antibody (C-term) - Product Information

Application Primary Accession Other Accession	WB, IHC, E P68133 P60010, P68136, P68135, P68137, P68134, P68139, P68138, P63269, P63268, P63267, P63270, Q5E9B5, A2BDB0, P63259, P63260, P63261, Q5ZMQ2, P63258, P04751, P68035, P68033, P68032, P68034, Q3ZC07, Q93400, P60711, P29751, Q6QAQ1, P60710, Q4R561, P60709, P48975
Reactivity Predicted	Human, Rat C.Elegans, Drosophila, Xenopus, Chicken, Bovine, Mouse, Rabbit, Zebrafish, Hamster,
Host Clonality Calculated MW Isotype Antigen Source	Horse, Monkey, Pig, Sheep, Yeast Rabbit Polyclonal H=42;M=42;Rat=42 KDa Rabbit IgG HUMAN

### ACTA1/α-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/α-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.

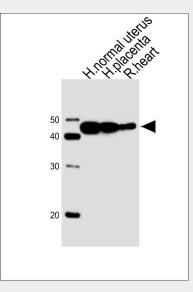
**Cellular Location** Cytoplasm, cytoskeleton.

# ACTA1/α-actin Antibody (C-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

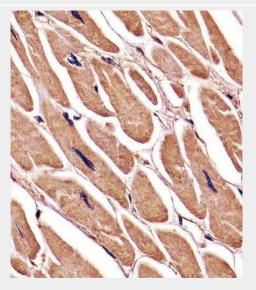
ACTA1/α-actin Antibody (C-term) - Images



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 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

# ACTA1/α-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/α-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)