

ACTA1/ α -actin Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AW5259

Product Information

Application	FC, IF, IHC-P, WB
Primary Accession	P68133
Other Accession	P68136 , P68135 , P68137 , P68134 , P68139 , P68138 , P04751 , P68035 , P68033 , P68032 , P68034 , Q3ZC07 , P62738 , P62740 , P62737 , P62736 , P08023 , P62739 , P04752 , P10995 , NP_001091.1
Reactivity	Mouse, Rat, Human
Predicted	Mouse, Rat, Rabbit, Chicken, Bovine, Xenopus
Host	Rabbit
Clonality	Polyclonal
Calculated MW	42051
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	58
Antigen Region	346-375
Other Names	ACTA1; ACTA; Actin, alpha skeletal muscle; Alpha-actin-1
Dilution	FC~~1:10~50 IF~~1:10~50 IHC-P~~1:100~500 WB~~1:1000
Target/Specificity	This ACTA1/Alpha-actin antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 346-375 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/ α -actin Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ACTA1
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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.

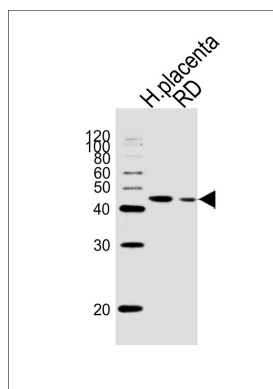
Background

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.

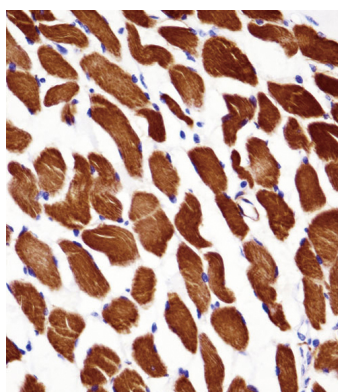
References

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 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)

Images

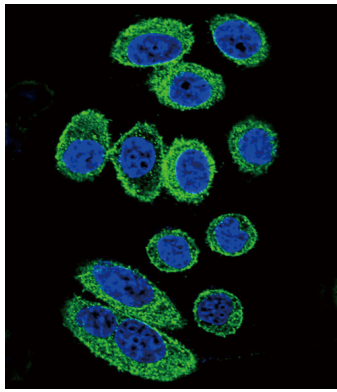


Western blot analysis of lysates from human placenta tissue lysate, RD cell line (from left to right), using ACTA1/ α -actin Antibody (C-term)(Cat. #AW5259). AW5259 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.

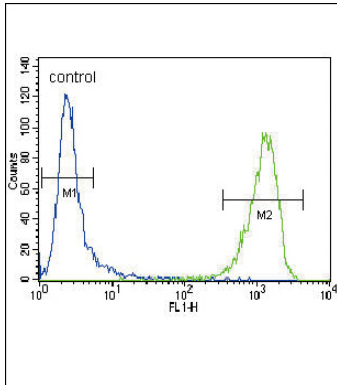


ACTA1/ α -actin Antibody (C-term) (AW5259) immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of ACTA1/ α -actin Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Confocal immunofluorescent analysis of ACTA1/ α -actin Antibody (C-term)(Cat#AW5259) with A549 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG



(green).DAPI was used to stain the cell nuclear (blue).



ACTA1/ α -actin Antibody (C-term) (Cat. #AW5259) flow cytometric analysis of CEM cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.