

# ALP (I-12): sc-79837

## BACKGROUND

ALP (actinin-associated LIM protein), also known as PDLIM3 (PDZ and LIM domain protein 3) is a 364 amino acid protein that contains one LIM zinc-binding domain and one PDZ domain and localizes to the cytoplasm, as well as to myofiber Z-lines. Existing as three alternatively spliced isoforms, two of which exhibit tissue-specific expression in skeletal muscle and heart, ALP interacts with  $\alpha$ -actinin-2 and, via this interaction, is thought to play a role in Actin filament organization, specifically regulating the association of actin filaments arrays with muscle cells. The gene encoding ALP maps to a region on human chromosome 4 that is associated with facioscapulohumeral muscular dystrophy, suggesting that defects in the ALP gene may be involved in the pathogenesis of muscular dystrophy.

## REFERENCES

1. Piétu, G., Alibert, O., Guichard, V., Lamy, B., Bois, F., Leroy, E., Mariage-Sampson, R., Houlgatte, R., Soularue, P. and Auffray, C. 1996. Novel gene transcripts preferentially expressed in human muscles revealed by quantitative hybridization of a high density cDNA array. *Genome Res.* 6: 492-503.
2. Xia, H., Winokur, S.T., Kuo, W.L., Altherr, M.R. and Bredt, D.S. 1997. Actinin-associated LIM protein: identification of a domain interaction between PDZ and spectrin-like repeat motifs. *J. Cell Biol.* 139: 507-515.

## CHROMOSOMAL LOCATION

Genetic locus: PDLIM3 (human) mapping to 4q35.1.

## SOURCE

ALP (I-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ALP of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-79837 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ALP (I-12) is recommended for detection of ALP of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ALP (I-12) is also recommended for detection of ALP in additional species, including canine.

Suitable for use as control antibody for ALP siRNA (h): sc-72485, ALP shRNA Plasmid (h): sc-72485-SH and ALP shRNA (h) Lentiviral Particles: sc-72485-V.

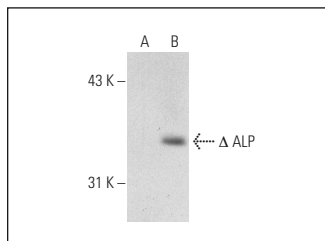
Molecular Weight of ALP: 39 kDa.

Positive Controls: ALP (h): 293T Lysate: sc-114160.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



ALP (I-12): sc-79837. Western blot analysis of ALP expression in non-transfected: sc-117752 (A) and truncated human ALP transfected: sc-114160 (B) 293T whole cell lysates.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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