

ALP (h): 293T Lysate: sc-114160

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 α -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

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4. Klaavuniemi, T., et al. 2004. The ZASP-like motif in actinin-associated LIM protein is required for interaction with the α -actinin rod and for targeting to the muscle Z-line. *J. Biol. Chem.* 279: 26402-26410.
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7. Arola, A.M., et al. 2007. Mutations in PDLIM3 and MYOZ1 encoding myocyte Z line proteins are infrequently found in idiopathic dilated cardiomyopathy. *Mol. Genet. Metab.* 90: 435-440.
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CHROMOSOMAL LOCATION

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

PRODUCT

ALP (h): 293T Lysate represents a lysate of human ALP transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

ALP (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive ALP antibodies. Recommended use: 10-20 µl per lane.

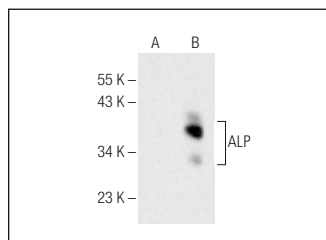
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

ALP (C-8): sc-373737 is recommended as a positive control antibody for Western Blot analysis of enhanced human ALP expression in ALP transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



ALP (C-8): sc-373737. Western blot analysis of ALP expression in non-transfected: sc-117752 (A) and human ALP transfected: sc-114160 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.