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


CHROMOSOMAL LOCATION

Genetic locus: PDLIM3 (human) mapping to 4q35.1; Pdlim3 (mouse) mapping to 8 B1.1.

SOURCE

ALP (B-10) is a mouse monoclonal antibody raised against amino acids 44-200 mapping within an internal region of ALP of human origin.

PRODUCT

Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

ALP (B-10) is recommended for detection of ALP of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Suitable for use as control antibody for ALP siRNA (h): sc-72485, ALP siRNA (m): sc-72486, ALP shRNA Plasmid (h): sc-72485-SH, ALP shRNA Plasmid (m): sc-72486-SH, ALP shRNA (h) Lentiviral Particles: sc-72485-V and ALP shRNA (m) Lentiviral Particles: sc-72486-V.

Molecular Weight of ALP: 39 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, K-562 whole cell lysate: sc-2203 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

DATA

RESEARCH USE

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