

δ-Dystrobrevin (h3): 293 Lysate: sc-177159

BACKGROUND

Dystrobrevins are protein components of the dystrophin complex, whose disruption leads to Duchenne muscular dystrophy and related diseases. α -Dystrobrevin is a dystrophin-related and -associated protein that is involved in synapse maturation and is required for normal muscle function. α -Dystrobrevin is a component of the dystrophin glycoprotein complex. It is localized to the cytoplasmic side of the sarcolemma and is highly concentrated at the neuromuscular junctions in skeletal muscle. The insertion of 57 amino acids by alternative splicing accounts for the increase in molecular mass of α -Dystrobrevin 1 in skeletal and cardiac muscle compared with brain and lung. α -Dystrobrevin containing complexes are found in endothelial and smooth muscle cells, while β -Dystrobrevin containing complexes are present at the basal region of renal epithelial cells. Additionally, β -Dystrobrevin is found in neurons and is highly enriched in postsynaptic densities. Alternative splicing of α -Dystrobrevin produces γ -Dystrobrevin (isoform 5), δ -Dystrobrevin (isoform 7), ϵ -Dystrobrevin (isoform 6) and ζ -Dystrobrevin (isoform 8). Additional isoforms may also exist.

REFERENCES

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2. Blake, D.J., Hawkes, R., Benson, M.A. and Beesley, P.W. 1999. Different dystrophin-like complexes are expressed in neurons and glia. *J. Cell Biol.* 147: 645-658.
3. Loh, N.Y., Newey, S.E., Davies, K.E. and Blake, D.J. 2000. Assembly of multiple dystrobrevin-containing complexes in the kidney. *J. Cell Sci.* 113: 2715-2724.
4. Gieseler, K., Mariol, M.C., Bessou, C., Migaud, M., Franks, C.J., Holden-Dye, L. and Segalat, L. 2001. Molecular, genetic and physiological characterisation of dystrobrevin-like (*dyb-1*) mutants of *Caenorhabditis elegans*. *J. Mol. Biol.* 307: 107-117.
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CHROMOSOMAL LOCATION

Genetic locus: DTNA (human) mapping to 18q12.1.

PRODUCT

δ -Dystrobrevin (h3): 293 Lysate represents a lysate of human δ -Dystrobrevin transfected 293 cells and is provided as 100 μ g protein in 200 μ l 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

δ -Dystrobrevin (h3): 293 Lysate is suitable as a Western Blotting positive control for human reactive δ -Dystrobrevin antibodies. Recommended use: 10-20 μ l per lane.

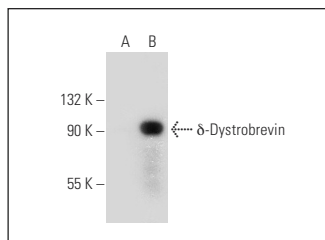
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

α -Dystrobrevin (B-1): sc-365102 is recommended as a positive control antibody for Western Blot analysis of enhanced human δ -Dystrobrevin expression in δ -Dystrobrevin transfected 293 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-IgG κ BP-HRP: sc-516102 or m-IgG κ 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



α -Dystrobrevin (B-1): sc-365102. Western blot analysis of δ -Dystrobrevin expression in non-transfected: sc-110760 (A) and human δ -Dystrobrevin transfected: sc-177159 (B) 293 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.