

α -Dystrobrevin (h): 293T Lysate: sc-177157

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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3. Loh, N.Y., et al. 2000. Assembly of multiple Dystrobrevin-containing complexes in the kidney. *J. Cell Sci.* 113: 2715-2724.
4. Enigk, R.E., et al. 2001. Cellular and molecular properties of α -Dystrobrevin in skeletal muscle. *Front. Biosci.* 6: D53-D64.
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6. Newey, S.E., et al. 2001. A novel mechanism for modulating synaptic gene expression: differential localization of α -Dystrobrevin transcripts in skeletal muscle. *Mol. Cell. Neurosci.* 17: 127-140.
7. Kulyte, A., et al. 2002. Characterization of human α -Dystrobrevin isoforms in HL-60 human promyelocytic leukemia cells undergoing granulocytic differentiation. *Mol. Biol. Cell* 13: 4195-4205.
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CHROMOSOMAL LOCATION

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

PRODUCT

α -Dystrobrevin (h): 293T Lysate represents a lysate of human α -Dystrobrevin transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

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

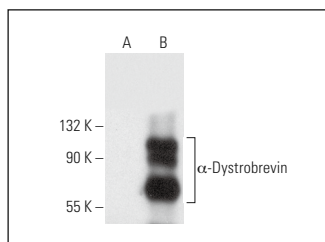
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Dystrobrevin (B-2): sc-376689 is recommended as a positive control antibody for Western Blot analysis of enhanced human α -Dystrobrevin expression in α -Dystrobrevin 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-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-2): sc-376689. Western blot analysis of α -Dystrobrevin expression in non-transfected: sc-117752 (A) and human α -Dystrobrevin transfected: sc-177157 (B) 293T whole cell lysates.

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.

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.