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β Enolase (h2): 293T Lysate: sc-170445

BACKGROUND

Enolases have been characterized as highly conserved cytoplasmic glycolytic enzymes that may be involved in differentiation. Three isoenzymes have been identified: α Enolase, β Enolase and γ Enolase. α Enolase expression has been detected in most tissues, whereas β Enolase is expressed predominantly in muscle tissue and γ Enolase is detected only in nervous tissue. These isoforms exist as both homodimers and heterodimers, and they play a role in converting phosphoglyceric acid to phosphoenolpyruvic acid in the glycolytic pathway. β Enolase, also known as Enolase 3 or MSE (muscle-specific Enolase), localizes to the cytoplasm and is expressed as a homodimer or a heterodimer with α Enolase in adult skeletal muscle. Mutations in the gene encoding β Enolase may result in glycogenesis type XIII (muscle-specific β Enolase deficiency), a disorder characterized by fatigability, muscle weakness and exercise-induced myalgia (or muscle pain).

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ENO3 (human) mapping to 17p13.2.

PRODUCT

β Enolase (h2): 293T Lysate represents a lysate of human β Enolase transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

β Enolase (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive β Enolase antibodies. Recommended use: 10-20 µl per lane.

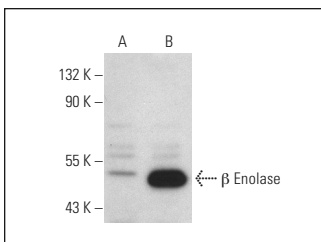
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

β Enolase (XX-10): sc-100811 is recommended as a positive control antibody for Western Blot analysis of enhanced human β Enolase expression in β Enolase 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



β Enolase (XX-10): sc-100811. Western blot analysis of β Enolase expression in non-transfected: sc-117752 (A) and human β Enolase transfected: sc-170445 (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.