

# β Enolase (W-25): sc-133550

## 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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## STORAGE

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

## CHROMOSOMAL LOCATION

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

## SOURCE

β Enolase (W-25) is an affinity purified rabbit polyclonal antibody raised against synthetic β Enolase peptide of human origin.

## PRODUCT

Each vial contains 50 μg IgG in 500 μl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

β Enolase (W-25) is recommended for detection of β Enolase of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for β Enolase siRNA (h): sc-37043, β Enolase shRNA Plasmid (h): sc-37043-SH and β Enolase shRNA (h) Lentiviral Particles: sc-37043-V.

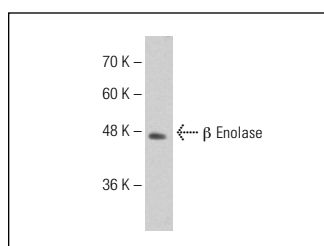
Molecular Weight of β Enolase: 47 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



β Enolase (W-25): sc-133550. Western blot analysis of β Enolase expression in Jurkat whole cell lysate.

## RESEARCH USE

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