SANTA CRUZ BIOTECHNOLOGY, INC.

γ Enolase (AT17D10): sc-517417

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 on 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 phosphenolpyruvic acid in the glycolytic pathway.

REFERENCES

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3. Keller, A., Berod, A., Dussaillant, M., Lamande, N., Gros, F. and Lucas, M. 1994. Coexpression of α and γ Enolase genes in neurons of adult rat brain. J. Neurosci. Res. 38: 493-504.
4. Zhang, E., Brewer, J.M., Minor, W., Carreira, L.A. and Lebioda, L. 1997. Mechanism of Enolase: the crystal structure of asymmetric dimer Enolase-2-phospho-D glycerate/Enolase-phosphenolpyruvate at 2.0 A resolution. Biochemistry 36: 12526-12534.
5. Deloulme, J.C., Helies, A., Ledig, M., Lucas, M. and Sensenbrenner, M. 1997. A comparative study of the distribution of α and γ Enolase subunits in cultured rat neural cells and fibroblasts. Int. J. Dev. Neurosci. 15: 183-194.
6. Sensenbrenner, M., Lucas, M. and Deloume, J.C. 1997. Expression of two neuronal markers, growth-associated protein 43 and neuron-specific Enolase, in rat glial cells. J. Mol. Med. 75: 653-663.

CHROMOSOMAL LOCATION

Genetic locus: ENO2 (human) mapping to 12p13.31.

SOURCE

γ Enolase (AT17D10) is a mouse monoclonal antibody raised against a recombinant protein corresponding to amino acids 1-434 of γ Enolase of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with 0.02% sodium azide and 10% glycerol.

STORAGE

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

RESEARCH USE

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

APPLICATIONS

γ Enolase (AT17D10) is recommended for detection of γ Enolase of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), flow cytometry (1 µg per 1 x 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for γ Enolase siRNA (h): sc-37045, γ Enolase shRNA Plasmid (h): sc-37045-SH and γ Enolase shRNA (h) Lentiviral Particles: sc-37045-V.

Molecular Weight of γ Enolase: 50 kDa.

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. 2) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.