SANTA CRUZ BIOTECHNOLOGY, INC.

γ Enolase (T-12): sc-31860

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

1. Whitehead, M.C., et al. 1982. Synapse formation is related to the onset of neuron-specific Enolase immunoreactivity in the avian auditory and vestibular systems. Dev. Neurosci. 5: 298-307.
2. Verma, M., et al. 1994. DNA sequences encoding Enolase are remarkably conserved from yeast to mammals. Life Sci. 55: 893-899.
3. Keller, A., et al. 1994. Coexpression of α and γ Enolase genes in neurons of adult rat brain. J. Neurosci. Res. 38: 493-504.
4. Zhang, E., et al. 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., et al. 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., et al. 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; Eno2 (mouse) mapping to 6 F2.

SOURCE

γ Enolase (T-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of γ Enolase of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-31860 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

PROTOCOLS

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

APPLICATIONS

γ Enolase (T-12) is recommended for detection of γ Enolase of mouse, rat and 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

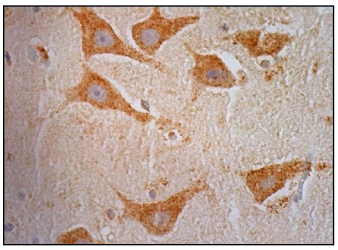
γ Enolase (T-12) is also recommended for detection of γ Enolase in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for γ Enolase siRNA (h): sc-37045, γ Enolase siRNA (m): sc-37046, γ Enolase shRNA Plasmid (h): sc-37045-SH, γ Enolase shRNA Plasmid (m): sc-37046-SH, γ Enolase shRNA (h) Lentiviral Particles: sc-37045-V and γ Enolase shRNA (m) Lentiviral Particles: sc-37046-V.

Molecular Weight of γ Enolase: 50 kDa.

Positive Controls: Y79 cell lysate: sc-2240, U-87 MG cell lysate: sc-2411 or SK-N-SH cell lysate: sc-2410.

DATA



γ Enolase (T-12): sc-31860. Immunoperoxidase staining of formalin fixed, paraffin-embedded human hippocampus tissue showing cytoplasmic staining of glandular cells.

RESEARCH USE

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

PROTOCOLS

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