

γ Enolase (D-7): sc-376375

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 phosphoenolpyruvic acid in the glycolytic pathway.

REFERENCES

- 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.
- Verma, M., et al. 1994. DNA sequences encoding enolase are remarkably conserved from yeast to mammals. *Life Sci.* 55: 893-899.

CHROMOSOMAL LOCATION

Genetic locus: ENO2 (human) mapping to 12p13.31; Eno2 (mouse) mapping to 6 F2.

SOURCE

γ Enolase (D-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 41-73 near the N-terminus of γ Enolase of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

γ Enolase (D-7) is available conjugated to agarose (sc-376375 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376375 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376375 PE), fluorescein (sc-376375 FITC), Alexa Fluor[®] 488 (sc-376375 AF488), Alexa Fluor[®] 546 (sc-376375 AF546), Alexa Fluor[®] 594 (sc-376375 AF594) or Alexa Fluor[®] 647 (sc-376375 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-376375 AF680) or Alexa Fluor[®] 790 (sc-376375 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-376375 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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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.

PROTOCOLS

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

APPLICATIONS

γ Enolase (D-7) is recommended for detection of γ Enolase of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

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.

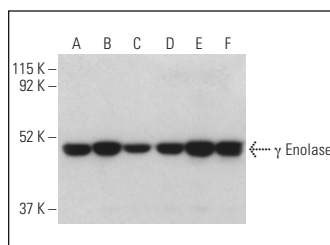
Molecular Weight of γ Enolase: 50 kDa.

Positive Controls: Y79 cell lysate: sc-2240, Hep G2 cell lysate: sc-2227 or BC₃H1 cell lysate: sc-2299.

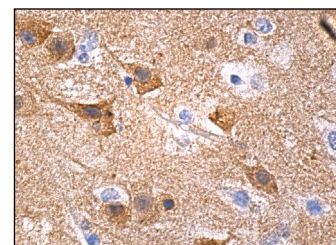
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



γ Enolase (D-7) HRP: sc-376375 HRP. Direct western blot analysis of γ Enolase expression in Hep G2 (A), SH-SY5Y (B), C6 (C), RPE-J (D), Y79 (E) and BC₃H1 (F) whole cell lysates.



γ Enolase (D-7): sc-376375. Immunoperoxidase staining of formalin fixed, paraffin-embedded human brain tissue showing neuropil and cytoplasmic staining of neuronal cells.

SELECT PRODUCT CITATIONS

- DeSouza, L.V., et al. 2013. Role of moesin in hyaluronan induced cell migration in glioblastoma multiforme. *Mol. Cancer* 12: 74.

RESEARCH USE

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