Enolase (A-5): sc-271384

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. The 433 amino acid protein shows 67% homology to yeast Enolase and 94% homology to rat nonneural Enolase. Studies also indicate that α Enolase is encoded by the same gene that encodes structural proteins.

REFERENCES

SOURCE
Enolase (A-5) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of α Enolase of human origin.

PRODUCT
Each vial contains 200 µg IgGₐκ light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Enolase (A-5) is available conjugated to agarose (sc-271384 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271384 HRP), 200 µg/ml for WB, IHC(P) and ELISA; and to either phycoerythrin (sc-271384 PE), fluorescein (sc-271384 FITC), Alexa Fluor® 488 (sc-271384 AF488) or Alexa Fluor® 647 (sc-271384 AF647), 200 µg/ml for IF, IHC(P) and FCM.

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APPLICATIONS
Enolase (A-5) is recommended for detection of α Enolase, β Enolase and γ Enolase of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg 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).

Molecular Weight of Enolase: 48 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409, HeLa whole cell lysate: sc-2200 or KNRK whole cell lysate: sc-2214.

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG HRP: sc-516102 or m-IgG 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 HRP-FITC: sc-516140 or m-IgG HRP-BP: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24914 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG HRP-BP: sc-516102 with DAB, 50X: sc-24982 and Immunohistolmount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA
Enolase (A-5): sc-271384. Western blot analysis of Enolase expression in HeLa (A), IMR-32 (B), NIH/3T3 (C), KNRK (D) and SH-SY5Y (E) whole cell lysates and rat brain tissue extract (F).

SELECT PRODUCT CITATIONS

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.

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