SANTA CRUZ BIOTECHNOLOGY, INC.

DPYS (A-17): sc-87090

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

DPYS (dihydropyrimidinase), also known as DHPase, Hydantoinase or DHP, is a 519 amino acid protein that is expressed in liver and kidney tissue and belongs to the DHOase family. Functioning as a homotetramer, DPYS uses zinc as a cofactor to catalyze the second step of reductive pyrimidine degradation, namely the conversion of 5,6-dihydrouracil to 3-ureidopropionate. DPYS is subject to post-translational carbamylation, an event which enhances the ability of DPYS to bind zinc ions. Defects in the gene encoding DPYS are the cause of DHP deficiency, an autosomal recessive disorder that is characterized by epileptic or convulsive attacks, dysmorphic features and severe developmental delay and congenital microvillous atrophy.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DPYS (human) mapping to 8q22.3; Dpys (mouse) mapping to 15 B3.1.

SOURCE

DPYS (A-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of DPYS of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-87090 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DPYS (A-17) is recommended for detection of DPYS 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

DPYS (A-17) is also recommended for detection of DPYS in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for DPYS siRNA (h): sc-77763, DPYS siRNA (m): sc-143167, DPYS shRNA Plasmid (h): sc-77763-SH, DPYS shRNA Plasmid (m): sc-143167-SH, DPYS shRNA (h) Lentiviral Particles: sc-77763-V and DPYS shRNA (m) Lentiviral Particles: sc-143167-V.

Molecular Weight of DPYS monomer: 54 kDa.

Molecular Weight of DPYS homotetramer: 215 kDa.

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™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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 or our catalog for detailed protocols and support products.