SANTA CRUZ BIOTECHNOLOGY, INC.

DPH5 (T-17): sc-104225

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The translation elongation factor 2 in eukaryotes (eEF-2) contains a unique post-translationally modified histidine residue, termed diphthamide, which serves as the only target for diphtheria toxin and *Pseudomonas aeruginosa* exotoxin A. Diphthamide biosynthesis is carried out by five highly conserved proteins, DPH1 to DPH5. The DPH protein family is evolutionarily conserved throughout eukaryotes. The DPH5 gene maps to chromosome one and encodes five isoforms as a result of alternative splicing events. Chromosome 1 is the largest human chromosome spanning about 260 million base pairs. Notable genes located on chromosome 1 include MUTYH, Hutchinson-Gilford progeria, Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DPH5 (human) mapping to 1p21.2; Dph5 (mouse) mapping to 3 G1.

RESEARCH USE

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

SOURCE

DPH5 (T-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DPH5 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-104225 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DPH5 (T-17) is recommended for detection of DPH5 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); non cross-reactive with family member DPH2.

Suitable for use as control antibody for DPH5 siRNA (h): sc-88546, DPH5 siRNA (m): sc-105315, DPH5 shRNA Plasmid (h): sc-88546-SH, DPH5 shRNA Plasmid (m): sc-105315-SH, DPH5 shRNA (h) Lentiviral Particles: sc-88546-V and DPH5 shRNA (m) Lentiviral Particles: sc-105315-V.

Molecular Weight of DPH5: 32/26/31/33 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (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.

PROTOCOLS

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