

DPH2 (A-14): sc-164223

BACKGROUND

DPH2 (diphthamide biosynthesis protein 2), also known as DPH2L2, is a 489 amino acid protein that shows strong expression in skeletal muscle; moderate expression in heart, small intestine, liver, pancreas, testis and colon; and lesser expression in brain, placenta, kidney, spleen, thymus, prostate, ovary and lymphocytes. DPH2 interacts with DPH1 and, functioning together as a dimer or multimer, DPH1 and DPH2 may participate in diphthamide biosynthesis. Diphthamide is a posttranslationally modified histidine residue which occurs in EF-2 (elongation factor 2) and targets diphtheria toxin ADP-ribosylation. The loss of DPH2 in *Saccharomyces cerevisiae* is believed to suppress zymocinicity. Two transcript variants encoding different isoforms have been found for this gene.

REFERENCES

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2. Phillips, N.J., Zeigler, M.R. and Deaven, L.L. 1996. A cDNA from the ovarian cancer critical region of deletion on chromosome 17p13.3. *Cancer Lett.* 102: 85-90.
3. Schultz, D.C., Balasara, B.R., Testa, J.R. and Godwin, A.K. 1998. Cloning and localization of a human diphthamide biosynthesis-like protein-2 gene, DPH2L2. *Genomics* 52: 186-191.
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CHROMOSOMAL LOCATION

Genetic locus: DPH2 (human) mapping to 1p34.1; Dph2 (mouse) mapping to 4 D2.1.

SOURCE

DPH2 (A-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DPH2 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-164223 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

DPH2 (A-14) is recommended for detection of DPH2 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 DPH5.

DPH2 (A-14) is also recommended for detection of DPH2 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for DPH2 siRNA (h): sc-78577, DPH2 siRNA (m): sc-143158, DPH2 shRNA Plasmid (h): sc-78577-SH, DPH2 shRNA Plasmid (m): sc-143158-SH, DPH2 shRNA (h) Lentiviral Particles: sc-78577-V and DPH2 shRNA (m) Lentiviral Particles: sc-143158-V.

Molecular Weight of DPH2: 61 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.