SANTA CRUZ BIOTECHNOLOGY, INC.

DHS (C-16): sc-46915

BACKGROUND

Deoxyhypusine synthase (DHS) is crucial for the posttranslational formation of hypusine, a modification of a specific lysine residue in eukaryotic initiation factor 5A (eIF-5A). Hypusine is formed by posttranslational modifications involving two enzymatic steps catalyzed by DHS and deoxyhypusine hydroxylase (DOHH). eIF-5A is essential for eukaryotic cell proliferation. DHS, which belongs to the deoxyhypusine synthase family of proteins, is important for the first step in the hypusine biosynthesis pathway. It acts as a catalyst for the NAD-dependent oxidative cleavage of spermidine and the ensuing transfer of the butylamine moiety of spermidine to the eIF-5A protein, to create the intermediate deoxyhypusine residue.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DHPS (human) mapping to 19p13.2; Dhps (mouse) mapping to 8 C3.

SOURCE

DHS (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of DHS 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-46915 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DHS (C-16) is recommended for detection of DHS of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

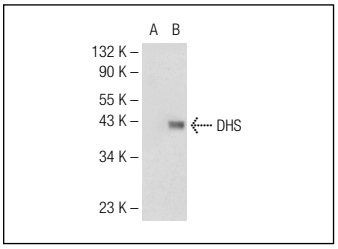
DHS (C-16) is also recommended for detection of DHS in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for DHS siRNA (h): sc-60535, DHS siRNA (m): sc-60536, DHS shRNA Plasmid (h): sc-60535-SH, DHS shRNA Plasmid (m): sc-60536-SH, DHS shRNA (h) Lentiviral Particles: sc-60535-V and DHS shRNA (m) Lentiviral Particles: sc-60536-V.

Molecular Weight of DHS: 40 kDa.

Positive Controls: DHS (h): 293T Lysate: sc-177128.

DATA



DHS (C-16): sc-46915. Western blot analysis of DHS expression in non-transfected: sc-117752 (**A**) and human DHS transfected: sc-177128 (**B**) 293T whole cell lysates.

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.