

DNASE2B (S-13): sc-131922

BACKGROUND

DNase II is a ubiquitously expressed endonuclease that, in the absence of divalent cations, catalyzes DNA hydrolysis. DNASE2B (deoxyribonuclease II β), also known as DLAD, is a 361 amino acid protein that shares structural and sequence similarity to DNase II. Expressed at high levels in salivary gland and eye tissues and at lower levels in prostate, lung and lymph node, DNASE2B localizes to the lysosome and functions to catalytically cleave nucleoside 3'-phosphates and 3'-phosphooligonucleotides. Via its endonucleolytic activity, DNASE2B hydrolyzes DNA under acidic conditions and plays a role in the degradation of nuclear DNA during lens differentiation within the eye. DNASE2B exists as two isoforms produced by alternative splicing events. While isoform one is found in tissues throughout the body, isoform two is expressed primarily in the lungs.

REFERENCES

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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.

CHROMOSOMAL LOCATION

Genetic locus: DNASE2B (human) mapping to 1p31.1.

SOURCE

DNASE2B (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of DNASE2B of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131922 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DNASE2B (S-13) is recommended for detection of DNASE2B isoforms 1 and 2 of 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).

Suitable for use as control antibody for DNASE2B siRNA (h): sc-88084, DNASE2B shRNA Plasmid (h): sc-88084-SH and DNASE2B shRNA (h) Lentiviral Particles: sc-88084-V.

Molecular Weight of DNASE2B: 40 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.

RESEARCH USE

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