



CTDSPL (N-14): sc-102463

BACKGROUND

The family of small CTD phosphatases preferentially catalyze the dephosphorylation of Ser 5 within a consensus repeat. As a member of this family, CTDSPL (CTD small phosphatase-like protein), also known as nuclear LIM interactor-interacting factor 1, RBSP3 or protein YA22, is a 276 amino acid nuclear protein that is ubiquitously expressed. There are two isoforms of CTDSPL that exist as a result of alternative splicing events. Since both of these isoforms reduce the level of phosphorylated Rb protein when transfected into mammary carcinoma cells, CTDSPL functions primarily as a phosphatase. The gene encoding CTDSPL is deleted in 15% of major epithelial cancers, suggesting that CTDSPL plays a role in tumor suppression. Due to evidence showing that inactive small CTD phosphatases interfere with the repressor element 1-silencing transcription factor/neuron-restrictive silencer factor (REST/NRSF) complex, therefore promoting neuronal differentiation, it is suspected that CTDSPL may function as a transcription regulator that acts to silence neuronal genes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CTDSPL (human) mapping to 3p22.2; Ctdspl (mouse) mapping to 9 F3.

SOURCE

CTDSPL (N-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of CTDSPL 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-102463 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CTDSPL (N-14) is recommended for detection of CTDSPL of mouse 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 members CTDSP1 or CTDSP2.

Suitable for use as control antibody for CTDSPL siRNA (h): sc-78502, CTDSPL siRNA (m): sc-142615, CTDSPL shRNA Plasmid (h): sc-78502-SH, CTDSPL shRNA Plasmid (m): sc-142615-SH, CTDSPL shRNA (h) Lentiviral Particles: sc-78502-V and CTDSPL shRNA (m) Lentiviral Particles: sc-142615-V.

Molecular Weight of CTDSPL: 31 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.