

CTDSPL2 (C-15): sc-138228

BACKGROUND

CTDSPL2 (CTD [carboxy-terminal domain, RNA polymerase II, polypeptide A] small phosphatase like 2), also known as HSPC058 or HSPC129, is a 466 amino acid protein that contains one FCP1 homology domain and belongs to the CTDSPL2 family. Existing as two alternatively spliced isoforms, CTDSPL2 is thought to function as a phosphatase and is encoded by a gene that maps to human chromosome 15q15.3. Encoding more than 700 genes, chromosome 15 is made up of approximately 106 million base pairs and comprises about 3% of the human genome. Angelman syndrome, Prader-Willi syndrome, Tay-Sachs disease and Marfan syndrome are all associated with defects in chromosome 15-localized genes.

REFERENCES

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- Midla, G.S. 2008. Diagnosis and management of patients with Marfan syndrome. *JAAPA* 21: 21-25.
- Daub, H., et al. 2008. Kinase-selective enrichment enables quantitative phosphoproteomics of the kinome across the cell cycle. *Mol. Cell* 31: 438-448.
- Dan, B. 2009. Angelman syndrome: current understanding and research prospects. *Epilepsia* 50: 2331-2339.
- Ferrer-Bolufer, I., et al. 2009. Tyrosinemia type 1 and Angelman syndrome due to paternal uniparental isodisomy 15. *J. Inherit. Metab. Dis.* 32: S349-S353.
- Wawrzik, M., et al. 2010. The C15orf2 gene in the Prader-Willi syndrome region is subject to genomic imprinting and positive selection. *Neurogenetics* 11: 153-161.

CHROMOSOMAL LOCATION

Genetic locus: CTDSPL2 (human) mapping to 15q15.3; Ctdspl2 (mouse) mapping to 2 E5.

SOURCE

CTDSPL2 (C-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of CTDSPL2 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-138228 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

CTDSPL2 (C-15) is recommended for detection of CTDSPL2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with CTDSPL.

CTDSPL2 (C-15) is also recommended for detection of CTDSPL2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CTDSPL2 siRNA (h): sc-90173, CTDSPL2 siRNA (m): sc-142616, CTDSPL2 shRNA Plasmid (h): sc-90173-SH, CTDSPL2 shRNA Plasmid (m): sc-142616-SH, CTDSPL2 shRNA (h) Lentiviral Particles: sc-90173-V and CTDSPL2 shRNA (m) Lentiviral Particles: sc-142616-V.

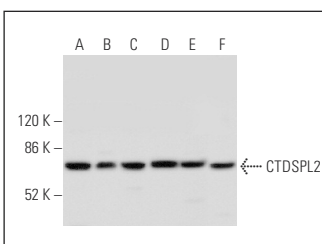
Molecular Weight of CTDSPL2 isoforms: 53/45 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, Y79 cell lysate: sc-2240 or SCC-4 whole cell lysate: sc-364363.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



CTDSPL2 (C-15): sc-138228. Western blot analysis of CTDSPL2 expression in SP2/O (A), U-251-MG (B), Y79 (C), SCC-4 (D) and NIH/3T3 (E) whole cell lysates and mouse testis tissue extract (F).

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.