SANTA CRUZ BIOTECHNOLOGY, INC.

CTDSPL2 (Y-14): sc-138230

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

1. Hurowitz, G.I., et al. 1993. Neuropsychiatric aspects of adult-onset Tay-Sachs disease: two case reports with several new findings. J. Neuropsychiatry Clin. Neurosci. 5: 30-36.
2. Midla, G.S. 2008. Diagnosis and management of patients with Marfan syndrome. JAAPA 21: 21-25.
3. Daub, H., et al. 2008. Kinase-selective enrichment enables quantitative phosphoproteomics of the kinome across the cell cycle. Mol. Cell 31: 438-448.
4. Dan, B. 2009. Angelman syndrome: current understanding and research prospects. Epilepsia 50: 2331-2339.
5. Ferrer-Bolufer, I., et al. 2009. Tyrosinemia type 1 and Angelman syndrome due to paternal uniparental isodisomy 15. J. Inherit. Metab. Dis. 23: E-Published.
6. 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, LOC100042507 (mouse) mapping to 19 C3.

SOURCE

CTDSPL2 (Y-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-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-138230 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 (Y-14) is recommended for detection of CTDSPL2 of mouse, rat and human origin, and LOC100042507 of mouse origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), 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 (Y-14) is also recommended for detection of CTDSPL2 in additional species, including equine, canine and bovine.

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

Molecular Weight of CTDSPL2 isoforms: 53/45 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.

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.