

DMXL1 (C-14): sc-139243

BACKGROUND

WD-repeats are motifs that are found in a variety of proteins and are characterized by a conserved core of 40-60 amino acids that commonly form a tertiary propeller structure. While proteins that contain WD-repeats participate in a wide range of cellular functions, they are generally involved in regulatory mechanisms concerning chromatin assembly, cell cycle control, signal transduction, RNA processing, apoptosis and vesicular trafficking. DMXL1 (DmX-like protein 1), also known as XL1 or FLJ44772, is a 3,027 amino acid protein that contains 15 WD repeats. DMXL1 is expressed in foreskin, tonsils, parathyroid, breast, eye, heart, bone, testis, small intestine, uterus and placenta. The gene that encodes DMXL1 maps to human chromosome 5.

REFERENCES

1. Komachi, K., Redd, M.J. and Johnson, A.D. 1994. The WD repeats of Tup1 interact with the homeo domain protein α 2. *Genes Dev.* 8: 2857-2867.
2. Kolman, M.F. and Egelhoff, T.T. 1997. *Dictyostelium* myosin heavy chain kinase A subdomains. Coiled-coil and wd repeat roles in oligomerization and substrate targeting. *J. Biol. Chem.* 272: 16904-16910.
3. Wolf, D.A., McKeon, F. and Jackson, P.K. 1999. F-box/WD-repeat proteins pop1p and Sud1p/Pop2p form complexes that bind and direct the proteolysis of cdc18p. *Curr. Biol.* 9: 373-376.
4. Suprenant, K.A., Tuxhorn, J.A., Daggett, M.A., Ahrens, D.P., Hostetler, A., Palange, J.M., VanWinkle, C.E. and Livingston, B.T. 2000. Conservation of the WD-repeat, microtubule-binding protein, EMAP, in sea urchins, humans, and the nematode *C. elegans*. *Dev. Genes Evol.* 210: 2-10.
5. Kraemer, C., Enklaar, T., Zabel, B. and Schmidt, E.R. 2000. Mapping and structure of DMXL1, a human homologue of the DmX gene from *Drosophila melanogaster* coding for a WD repeat protein. *Genomics* 64: 97-101.
6. Hisbergues, M., Gaitatzes, C.G., Joset, F., Bedu, S. and Smith, T.F. 2001. A noncanonical WD-repeat protein from the cyanobacterium *Synechocystis* PCC6803: structural and functional study. *Protein Sci.* 10: 293-300.

CHROMOSOMAL LOCATION

Genetic locus: DMXL1 (human) mapping to 5q23.1; Dmx1 (mouse) mapping to 18 D1.

SOURCE

DMXL1 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of DMXL1 of human origin.

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.

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-139243 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

DMXL1 (C-14) is recommended for detection of DMXL1 of mouse, rat 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 DMXL2.

DMXL1 (C-14) is also recommended for detection of DMXL1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for DMXL1 siRNA (h): sc-91728, DMXL1 siRNA (m): sc-143068, DMXL1 shRNA Plasmid (h): sc-91728-SH, DMXL1 shRNA Plasmid (m): sc-143068-SH, DMXL1 shRNA (h) Lentiviral Particles: sc-91728-V and DMXL1 shRNA (m) Lentiviral Particles: sc-143068-V.

Molecular Weight of DMXL1: 338 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.