

DCDC2 (h): 293T Lysate: sc-116299

BACKGROUND

The DCDC2 gene encodes the DCDC2 protein (Doublecortin-containing protein 2, RU2, RU2S) which contains two Doublecortin peptide domains similar to those in the Doublecortin gene. DCDC2 is transcribed as a "normal" gene, which results in a sense transcript (RU2S), but when it is transcribed in the opposite direction, a shorter antisense transcript (RU2AS), which is found in tumors, results. The DCDC2 protein demonstrates ubiquitous expression, whereas RU2AS expression is restricted to normal kidney, bladder, liver and testis, and to tumors of various histologic origins. The deduced DCDC2 protein contains 476 amino acids, while the RU2AS protein contains 84 residues. There is a significant association between dyslexia and several SNPs within the DCDC2 gene.

REFERENCES

1. Van Den Eynde, B.J., et al. 1999. A new antigen recognized by cytolytic T lymphocytes on a human kidney tumor results from reverse strand transcription. *J. Exp. Med.* 190: 1793-1800.
2. Cope, N., et al. 2005. Strong evidence that KIAA0319 on chromosome 6p is a susceptibility gene for developmental dyslexia. *Am. J. Hum. Genet.* 76: 581-591.
3. Meng, H., et al. 2005. From the cover: DCDC2 is associated with reading disability and modulates neuronal development in the brain. *Proc. Natl. Acad. Sci. USA* 102: 17053-17058.
4. Schumacher, J., et al. 2005. Strong genetic evidence of DCDC2 as a susceptibility gene for dyslexia. *Am. J. Hum. Genet.* 78: 52-62.
5. McGrath, L.M., et al. 2006. Breakthroughs in the search for dyslexia candidate genes. *Trends Mol. Med.* 12: 333-341.

CHROMOSOMAL LOCATION

Genetic locus: DCDC2 (human) mapping to 6p22.3.

PRODUCT

DCDC2 (h): 293T Lysate represents a lysate of human DCDC2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

DCDC2 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive DCDC2 antibodies. Recommended use: 10-20 µl per lane.

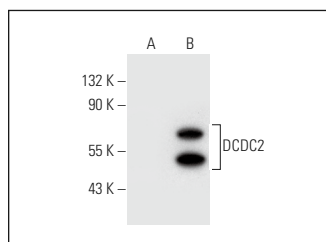
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

DCDC2 (E-11): sc-398638 is recommended as a positive control antibody for Western Blot analysis of enhanced human DCDC2 expression in DCDC2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

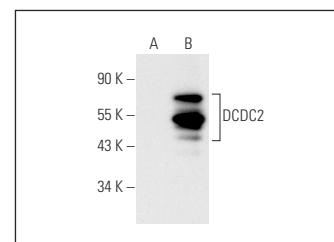
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



DCDC2 (E-11): sc-398638. Western blot analysis of DCDC2 expression in non-transfected: sc-117752 (A) and human DCDC2 transfected: sc-116299 (B) 293T whole cell lysates.



DCDC2 (E-8): sc-166052. Western blot analysis of DCDC2 expression in non-transfected: sc-117752 (A) and human DCDC2 transfected: sc-116299 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.