

CRELD2 (h): 293T Lysate: sc-116270

BACKGROUND

The epidermal growth factor (EGF) repeat-containing proteins constitute an expanding family of proteins that are involved in several cellular activities, such as blood coagulation, fibrinolysis, cell adhesion and neural and vertebrate development. CRELD2 (cysteine-rich with EGF-like domains 2) is a 353 amino acid protein that is ubiquitously expressed and contains two FU domains and two EGF-like domains. Localized to the endoplasmic reticulum and secreted into the cell, CRELD2 interacts with AChR α 4, possibly regulating its transport. Human CRELD2 shares 69% amino acid identity with its mouse counterpart, suggesting a conserved role between species. Multiple isoforms of CRELD2 exist due to alternative splicing events. The gene encoding CRELD2 maps to human chromosome 22, which houses over 500 genes and is the second smallest human chromosome. Mutations in several of the genes that map to chromosome 22 are involved in the development of Phelan-McDermid syndrome, Neurofibromatosis type 2, autism and schizophrenia.

REFERENCES

1. Gilbert, F. 1998. Disease genes and chromosomes: disease maps of the human genome. *Chromosome 22. Genet. Test.* 2: 89-97.
2. Rupp, P.A., et al. 2002. Identification, genomic organization and mRNA expression of CRELD1, the founding member of a unique family of matrix-cellular proteins. *Gene* 293: 47-57.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607171. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Ortiz, J.A., et al. 2005. The cysteine-rich with EGF-like domains 2 (CRELD2) protein interacts with the large cytoplasmic domain of human neuronal nicotinic acetylcholine receptor α 4 and β 2 subunits. *J. Neurochem.* 95: 1585-1596.
5. Maslen, C.L., et al. 2006. CRELD2: gene mapping, alternate splicing, and comparative genomic identification of the promoter region. *Gene* 382: 111-120.
6. Jariwala, U., et al. 2007. Identification of novel androgen receptor target genes in prostate cancer. *Mol. Cancer* 6: 39.

CHROMOSOMAL LOCATION

Genetic locus: CRELD2 (human) mapping to 22q13.33.

PRODUCT

CRELD2 (h): 293T Lysate represents a lysate of human CRELD2 transfected 293T cells and is provided as 100 μ g protein in 200 μ l 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.

PROTOCOLS

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

APPLICATIONS

CRELD2 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive CRELD2 antibodies. Recommended use: 10-20 μ l per lane.

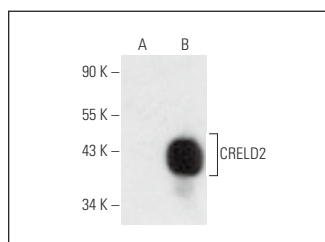
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

CRELD2 (A-8): sc-365168 is recommended as a positive control antibody for Western Blot analysis of enhanced human CRELD2 expression in CRELD2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

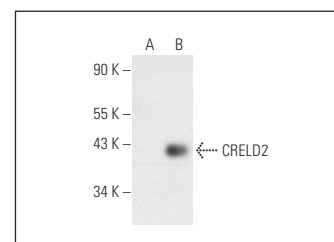
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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



CRELD2 (A-8): sc-365168. Western blot analysis of CRELD2 expression in non-transfected: sc-117752 (A) and human CRELD2 transfected: sc-116270 (B) 293T whole cell lysates.



CRELD2 (C-7): sc-271858. Western blot analysis of CRELD2 expression in non-transfected: sc-117752 (A) and human CRELD2 transfected: sc-116270 (B) 293T whole cell lysates.

RESEARCH USE

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