

CRELD2 (A-8): sc-365168

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.

CHROMOSOMAL LOCATION

Genetic locus: CRELD2 (human) mapping to 22q13.33; Creld2 (mouse) mapping to 15 E3.

SOURCE

CRELD2 (A-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 141-173 within an internal region of CRELD2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG κ light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CRELD2 (A-8) is available conjugated to agarose (sc-365168 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365168 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365168 PE), fluorescein (sc-365168 FITC), Alexa Fluor[®] 488 (sc-365168 AF488), Alexa Fluor[®] 546 (sc-365168 AF546), Alexa Fluor[®] 594 (sc-365168 AF594) or Alexa Fluor[®] 647 (sc-365168 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-365168 AF680) or Alexa Fluor[®] 790 (sc-365168 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-365168 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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RESEARCH USE

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

APPLICATIONS

CRELD2 (A-8) is recommended for detection of CRELD2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

CRELD2 (A-8) is also recommended for detection of CRELD2 in additional species, including porcine.

Suitable for use as control antibody for CRELD2 siRNA (h): sc-77023, CRELD2 siRNA (m): sc-142568, CRELD2 shRNA Plasmid (h): sc-77023-SH, CRELD2 shRNA Plasmid (m): sc-142568-SH, CRELD2 shRNA (h) Lentiviral Particles: sc-77023-V and CRELD2 shRNA (m) Lentiviral Particles: sc-142568-V.

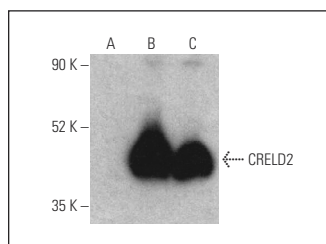
Molecular Weight of CRELD2: 38 kDa.

Positive Controls: mouse prostate extract: sc-364249, CRELD2 (h): 293T Lysate: sc-116270 or CRELD2 (m): 293T Lysate: sc-119455.

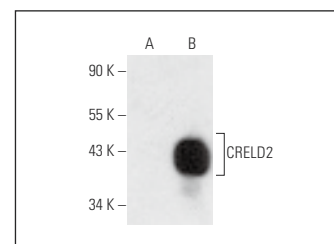
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



CRELD2 (A-8) HRP: sc-365168 HRP. Direct western blot analysis of CRELD2 expression in non-transfected: sc-117752 (A), mouse CRELD2 transfected: sc-119455 (B) and sc-116270 (C) 293T whole cell lysates.



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.

SELECT PRODUCT CITATIONS

1. Li, Y., et al. 2022. Endoplasmic reticulum stress increases exosome biogenesis and packaging relevant to sperm maturation in response to oxidative stress in obese mice. *Reprod. Biol. Endocrinol.* 20: 161.

STORAGE

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