

CDSN (C-3): sc-514845

BACKGROUND

Corneodesmosin (CDSN), also designated S protein, is a secreted protein found in corneodesmosomes, the intercellular structures that are involved in desquamation and the shedding of superficial corneocytes from the skin surface. CDSN expression is only observed in skin and its expression is associated with susceptibility to psoriasis, a heterogeneous inflammatory skin disease. The gene encoding for corneodesmosin, CDSN, is a strong candidate gene for psoriasis susceptibility due to its exclusive expression in differentiating keratinocytes. The CDSN gene contains 2 exons which encode a presumed 486-amino acid protein, including a putative 16-amino acid signal sequence. The CDSN protein shows homology to Loricrin, Cytokeratin 1 and Cytokeratin 10, which are all major components of the granular layer.

REFERENCES

1. Capon, F., et al. 2004. A synonymous SNP of the corneodesmosin gene leads to increased mRNA stability and demonstrates association with psoriasis across diverse ethnic groups. *Hum. Mol. Genet.* 13: 2361-2368.
2. Orrù, S., et al. 2004. Mapping of the major psoriasis-susceptibility locus (PSORS1) in a 70-Kb interval around the corneodesmosin gene (CDSN). *Am. J. Hum. Genet.* 76: 164-171.
3. Yang, T., et al. 2004. Epidermal detachment, desmosomal dissociation, and destabilization of corneodesmosin in mice. *Genes Dev.* 18: 2354-2358.
4. Allen, M.H., et al. 2005. The major psor psoriasis. *J. Invest. Dermatol.* 124: 103-106.

CHROMOSOMAL LOCATION

Genetic locus: CDSN (human) mapping to 6p21.33; Cdsn (mouse) mapping to 17 B1.

SOURCE

CDSN (C-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 204-227 within an internal region of CDSN of mouse origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CDSN (C-3) is available conjugated to agarose (sc-514845 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514845 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514845 PE), fluorescein (sc-514845 FITC), Alexa Fluor® 488 (sc-514845 AF488), Alexa Fluor® 546 (sc-514845 AF546), Alexa Fluor® 594 (sc-514845 AF594) or Alexa Fluor® 647 (sc-514845 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514845 AF680) or Alexa Fluor® 790 (sc-514845 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-514845 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

CDSN (C-3) is recommended for detection of CDSN of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Suitable for use as control antibody for CDSN siRNA (h): sc-60347, CDSN siRNA (m): sc-60348, CDSN shRNA Plasmid (h): sc-60347-SH, CDSN shRNA Plasmid (m): sc-60348-SH, CDSN shRNA (h) Lentiviral Particles: sc-60347-V and CDSN shRNA (m) Lentiviral Particles: sc-60348-V.

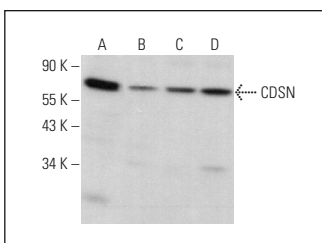
Molecular Weight of CDSN: 52 kDa.

Positive Controls: LADMAC whole cell lysate: sc-364189, A-431 whole cell lysate: sc-2201 or L929 cell lysate: sc-24729.

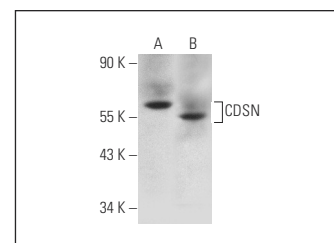
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



CDSN (C-3): sc-514845. Western blot analysis of CDSN expression in A-431 (A), MCF7 (B), NIH/3T3 (C) and 3T3-L1 (D) whole cell lysates.



CDSN (C-3): sc-514845. Western blot analysis of CDSN expression in LADMAC (A) and L929 (B) whole cell lysates.

STORAGE

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

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.