

CDSN (I-20): sc-49619

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 two exons which encode a presumed 486 amino acid protein, including a putative 16 amino acid signal sequence. The CDSN protein shows homology to loricrin, keratin-1 and keratin-10, which are all major components of the granular layer.

REFERENCES

1. Capon, F., Allen, M.H., Ameen, M., Burden, A.D., Tillman, D., Barker, J.N. and Trembath, R.C. 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., Giuressi, E., Carcassi, C., Casula, M. and Contu, L. 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., Liang, D., Koch, P.J., Hohl, D., Kheradmand, F. and Overbeek, P.A. 2004. Epidermal detachment, desmosomal dissociation, and destabilization of corneodesmosin in mice. *Genes Dev.* 18: 2354-2358.
4. Allen, M.H., Ameen, H., Veal, C., Evans, J., Ramrakha-Jones, V.S., Marsland, A.M., Burden, A.D., Griffiths, C.E., Trembath, R.C. and Barker, J.N. 2005. The major psoriasis susceptibility locus PSORS1 is not a risk factor for late-onset psoriasis. *J. Invest. Dermatol.* 124: 103-106.
5. Ameen, M., Allen, M.H., Fisher, S.A., Lewis, C.M., Cuthbert, A., Kondeatis, E., Vaughan, R.W., Murakami, H., Nakagawa, H. and Barker, J.N. 2005. Corneodesmosin (CDSN) gene association with psoriasis vulgaris in Caucasian but not in Japanese populations. *Clin. Exp. Dermatol.* 30: 414-418.
6. Butt, C., Rahman, P., Siannis, F., Farewell, V.T. and Gladman, D.D. 2005. Corneodesmosin polymorphisms in psoriatic arthritis. *Rheumatology* 44: 684-685.
7. Dávalos, N.O., García-Vargas, A., Pforr, J., Dávalos, I.P., Picos-Cárdenas, V.J., García-Cruz, D., Kruse, R., Figueroa, L.E., Nöthen, M.M. and Betz, R.C. 2005. A non-sense mutation in the corneodesmosin gene in a Mexican family with hypotrichosis simplex of the scalp. *Br. J. Dermatol.* 153: 1216-1219.

CHROMOSOMAL LOCATION

Genetic locus: *Cdsn* (mouse) mapping to 17 B1.

STORAGE

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

SOURCE

CDSN (I-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CDSN of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-49619 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

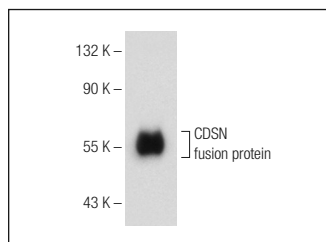
CDSN (I-20) is recommended for detection of Corneodesmosin of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 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 (m): sc-60348, CDSN shRNA Plasmid (m): sc-60348-SH and CDSN shRNA (m) Lentiviral Particles: sc-60348-V.

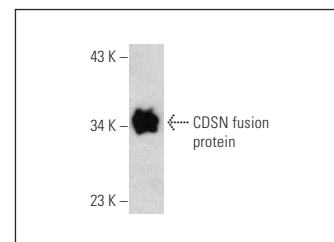
Molecular Weight of CDSN: 52 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

DATA



CDSN (I-20): sc-49619. Western blot analysis of human recombinant CDSN fusion protein.



CDSN (I-20): sc-49619. Western blot analysis of human recombinant CDSN fusion protein.

RESEARCH USE

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

PROTOCOLS

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