

CDSN (G-18): sc-49618

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, Cytokeratin 1 and Cytokeratin 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., Giurelli, 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.

CHROMOSOMAL LOCATION

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

SOURCE

CDSN (G-18) 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-49618 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CDSN (G-18) is recommended for detection of CDSN 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.

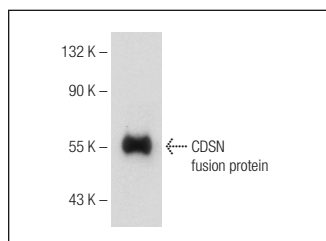
Molecular Weight of CDSN: 52 kDa.

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

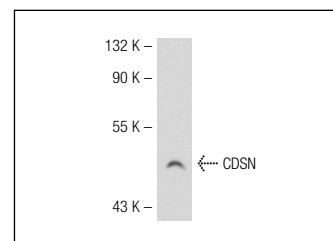
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CDSN (G-18): sc-49618. Western blot analysis of human recombinant CDSN fusion protein.



CDSN (G-18): sc-49618. Western blot analysis of CDSN expression in NIH/3T3 whole cell lysate.

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.

MONOS
Satisfaction
Guaranteed

Try **CDSN (C-3): sc-514845**, our highly recommended monoclonal alternative to CDSN (G-18).