

DSC2 (m): 293T Lysate: sc-119847

BACKGROUND

Desmogleins are type I membrane proteins that are important for cell adhesion and are expressed in great abundance at the desmosomes, which are adhesive cell junctions. Desmogleins belong to the cadherin family and consist of dsg1, dsg2, dsg3 and dsg4. The desmosomal cadherin desmocollins DSC1 and DSC3 are also type I membrane proteins that may contribute to epidermal cell positioning by mediating differential adhesiveness between cells that express different isoforms. Alternative splicing gives rise to isoforms A and B of DSC1 and DSC3, which differ in their C-termini. DSC2 exhibits homophilic interactions in solution, and forms heterophilic interactions with dsg2. DSC2 and DSC1 are present at high levels in the suprabasal skin layers. DSC2 protein is predominantly localized to specialized adhesion junctions between the cortex and the medulla.

REFERENCES

1. Syed, S.E., Trinmanan, B., Martin, S., Major, S., Hutchinson, J., Magee and A.I. 2002. Molecular interactions between desmosomal cadherins. *Biochem. J.* 362: 317-327.
2. Kljuic, A., Bauer, R.C. and Christiano, A.M. 2004. Genomic organization of mouse desmocollin genes reveals evolutionary conservation. *DNA Seq.* 15: 148-152.
3. Duhieu, S., Laperdrix, C., Hashimoto, T., Le Bitoux, M.A. and Haftek, M. 2005. Desmosome-binding antibody KM48 recognises an extracellular antigen different from desmosomal cadherins dsg1-3 and DSC1-3. *Eur. J. Dermatol.* 15: 80-84.
4. Johns, S.A., Soullier, S., Rashbass, P. and Cunliffe, V.T. 2005. FOXN1 is required for tissue assembly and desmosomal cadherin expression in the hair shaft. *Dev. Dyn.* 232: 1062-1068.

CHROMOSOMAL LOCATION

Genetic locus: Dsc2 (mouse) mapping to 18 A2.

PRODUCT

DSC2 (m): 293T Lysate represents a lysate of mouse DSC2 transfected 293T cells and is provided as 100 µg protein in 200 µl 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.

APPLICATIONS

DSC2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive DSC2 antibodies. Recommended use: 10-20 µl per lane.

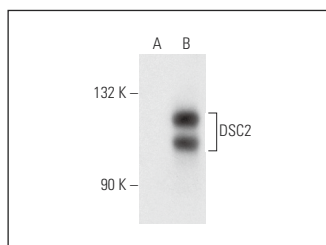
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

DSC2/3 (7G6): sc-53485 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse DSC2 expression in DSC2 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-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.

DATA



DSC2/3 (7G6): sc-53485. Western blot analysis of DSC2 expression in non-transfected: sc-117752 (A) and mouse DSC2 transfected: sc-119847 (B) 293T whole cell lysates.

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.