

# Dermcidin (E-7): sc-393728

## BACKGROUND

Antimicrobial peptides participate in the innate response, which may provide a barrier for protection against infection. The Dermcidin gene encodes an antimicrobial peptide DCD-1, which is constitutively expressed in sweat glands, secreted into the sweat, and transported to the epidermal surface. DCD-1 displays antimicrobial activity in response to a variety of pathogenic microorganisms. Overexpression of Dermcidin in breast cancers promotes cell growth and survival, and is coupled with a focal copy number gain of its locus on human chromosome 12q13.2.

## REFERENCES

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- Murakami, M., et al. 2004. Postsecretory processing generates multiple cathelicidins for enhanced topical antimicrobial defense. *J. Immunol.* 172: 3070-3077.
- Rieg, S., et al. 2005. Deficiency of Dermcidin-derived antimicrobial peptides in sweat of patients with atopic dermatitis correlates with an impaired innate defense of human skin *in vivo*. *J. Immunol.* 174: 8003-8010.
- Stewart, G.D., et al. 2008. Variation in Dermcidin expression in a range of primary human tumours and in hypoxic/oxidatively stressed human cell lines. *Br. J. Cancer* 99: 126-132.

## CHROMOSOMAL LOCATION

Genetic locus: DCD (human) mapping to 12q13.2.

## SOURCE

Dermcidin (E-7) is a mouse monoclonal antibody raised against amino acids 20-110 mapping at the C-terminus of Dermcidin of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Dermcidin (E-7) is recommended for detection of Dermcidin precursor and DCD-1 active peptide of 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).

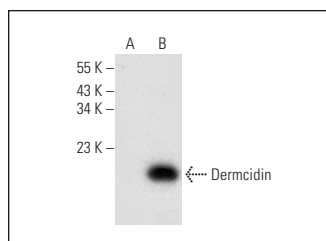
Suitable for use as control antibody for Dermcidin siRNA (h): sc-105288, Dermcidin shRNA Plasmid (h): sc-105288-SH and Dermcidin shRNA (h) Lentiviral Particles: sc-105288-V.

Positive Controls: human Dermcidin transfected HEK293T whole cell lysate.

## 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



Dermcidin (E-7): sc-393728. Western blot analysis of Dermcidin expression in non-transfected (A) and human Dermcidin transfected (B) HEK293T 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](http://www.scbt.com) for detailed protocols and support products.