

Dermcidin, DCD - 1L

Synthetic Peptide Catalog # SP2420a

Specification

Dermcidin, DCD - 1L - Product Information

Primary Accession Sequence P81605

NH2-SSLLEKGLDGAKKAVGGLGKLGKDAVEDL

ESVGKGAVHDVKDVLDSVL-COOH

Dermcidin, DCD - 1L - Additional Information

Gene ID 117159

Other Names

Dermcidin, 34--, Preproteolysin, Survival-promoting peptide, DCD-1, DCD, AIDD, DSEP

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Dermcidin, DCD - 1L - Protein Information

Name DCD (HGNC:14669)

Function

[DCD-1]: Found in sweat, has an antimicrobial activity during early bacterial colonization (PubMed:11694882, PubMed:23426625). The secreted peptide assembles into homohexameric complexes that can associate with and also insert into pathogen membranes (PubMed:23426625). Once inserted in bacteria membranes forms anion channels probably altering the transmembrane potential essential for bacterial survival (PubMed:23426625). Highly effective against E.coli, E.faecalis, S.aureus and C.albicans (PubMed:11694882). Optimal pH and salt concentration resemble the conditions in sweat (PubMed:11694882). Also exhibits proteolytic activity, cleaving on the C-terminal side of Arg and, to a lesser extent, Lys residues (PubMed:17448443).

Cellular Location







Secreted [DCD-1]: Secreted. Membrane; Peripheral membrane protein. Membrane; Single-pass membrane protein. Note=The secreted peptide assembles into homohexameric complexes that can probably associate with pathogen membranes and also insert into these membranes where they behave as channels.

Tissue Location

Detected in urine (at protein level) (PubMed:25326458, PubMed:36213313, PubMed:37453717). Constitutively expressed in eccrine sweat gland cells (at protein level). Secreted into the sweat at a concentration of 1-10 micrograms/ml

Dermcidin, DCD - 1L - Images