

# DCD Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP6718b

# **Specification**

# DCD Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

P81605

# DCD Antibody (C-term) Blocking Peptide - Additional Information

**Gene ID 117159** 

#### **Other Names**

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

## Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP6718b>AP6718b</a> was selected from the C-term region of human DCD. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

## **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.

# DCD Antibody (C-term) Blocking Peptide - Protein Information

# Name DCD (HGNC:14669)

### **Function**

[DCD-1]: Found in sweat, has an antimicrobial activity during early bacterial colonization (PubMed:<a href="http://www.uniprot.org/citations/11694882" target="\_blank">11694882</a>, PubMed:<a href="http://www.uniprot.org/citations/23426625" target="\_blank">23426625</a>). The secreted peptide assembles into homohexameric complexes that can associate with and also insert into pathogen membranes (PubMed:<a href="http://www.uniprot.org/citations/23426625" target="\_blank">23426625</a>). Once inserted in bacteria membranes forms anion channels probably altering the transmembrane potential essential for bacterial survival (PubMed:<a href="http://www.uniprot.org/citations/23426625" target="\_blank">23426625</a>). Highly effective against E.coli, E.faecalis, S.aureus and C.albicans (PubMed:<a href="http://www.uniprot.org/citations/11694882" target="\_blank">11694882</a>). Optimal pH and salt concentration resemble the conditions in sweat (PubMed:<a href="http://www.uniprot.org/citations/11694882" target="\_blank">11694882</a>). Also exhibits



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proteolytic activity, cleaving on the C-terminal side of Arg and, to a lesser extent, Lys residues (PubMed:<a href="http://www.uniprot.org/citations/17448443" target=" blank">17448443</a>).

#### **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

# DCD Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

## Blocking Peptides

DCD Antibody (C-term) Blocking Peptide - Images

# DCD Antibody (C-term) Blocking Peptide - Background

DCD is a secreted protein that is subsequently processed into mature peptides of distinct biological activities. The C-terminal peptide is constitutively expressed in sweat and has antibacterial and antifungal activities. The N-terminal peptide, also known as diffusible survival evasion peptide, promotes neural cell survival under conditions of severe oxidative stress. A glycosylated form of the N-terminal peptide may be associated with cachexia (muscle wasting) in cancer patients.

# DCD Antibody (C-term) Blocking Peptide - References

Todorov, P.T., J. Biol. Chem. 272 (19), 12279-12288 (1997)