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Dermcidin Rabbit pAb

Catalog # AP97285

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	P81605
Other Accession	P81605
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	11284
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Dermcidin/DCD
Epitope Specificity	63-109/110
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	117159
Other Names	AIDD; DCD-1; DSEP; HCAP; PIF; DCD_HUMAN; DCD; Preproteolysin; 3.4.-.-; dermcidin; proteolysis inducing factor; diffusible survival/evasion peptide; survival promoting peptide
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.