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Defensin beta 2 Rabbit pAb

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Catalog # AP52038

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	O15263
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	7038
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Defensin beta 4
Epitope Specificity	24-64/64
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Secreted.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Defensins form a family of microbicidal and cytotoxic peptides made by neutrophils. Members of the defensin family are highly similar in protein sequence. This gene encodes defensin, beta 4, an antibiotic peptide which is locally regulated by inflammation. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	100289462;1673
Other Names	Defensin beta 4A {ECO:0000312|HGNC:HGNC:2767}, Beta-defensin 2, BD-2, hBD-2, Defensin, beta 2, Skin-antimicrobial peptide 1, SAP1, DEFB4A, DEFB102, DEFB2, DEFB4
Dilution	IHC-P=1:100-500,IHC-F=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	DEFB4A
Synonyms	DEFB102, DEFB2, DEFB4

Function	Exhibits antimicrobial activity against Gram-negative bacteria and Gram-positive bacteria, with highest activity against Gram-negative bacteria (PubMed:10837369, PubMed:9202117). Antimicrobial activity against P.aeruginosa seems to be salt-sensitive and is reduced with high salt concentrations greater than 25 mM (PubMed:10837369). Also exhibits antimicrobial activity against the yeast C.albicans (PubMed:10837369, PubMed:30050988, PubMed:9202117). Permeabilizes C.albicans cell membranes via targeting plasma membrane lipid phosphatidylinositol 4,5-bisphosphate (PIP2), thereby leading to cell fragmentation and cell death (PubMed:30050988). Acts as a ligand for C- C chemokine receptor CCR6 (PubMed:10521347, PubMed:20068036). Binds to CCR6 and induces chemotactic activity of CCR6-expressing cells, such as immature dendritic cells and memory T cells (PubMed:10521347, PubMed:20068036).
Cellular Location	Secreted.
Tissue Location	Expressed in lung epithelial cells (at protein level) (PubMed:10837369). Expressed in foreskin, lung and trachea (PubMed:9202117). Lower expression in kidney, uterus and salivary gland tissue (PubMed:9202117). Expressed in epithelial cells of the respiratory tract, with higher expression in distal parenchyma of the lung, trachea, and tonsils, and lower expression in pharynx and adenoid, and low expression in tongue and larynx (PubMed:10837369, PubMed:9831658).

Background

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References

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Liu L.,et al.Gene 222:237-244(1998).
Diamond G.,et al.Infect. Immun. 68:113-119(2000).
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Kluever E.,et al.J. Pept. Res. 59:241-248(2002).

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