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DEFA3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19266b

Product Information

Application	IHC-P-Leica, WB, E
Primary Accession	P59666
Other Accession	NP_005208.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB30594
Calculated MW	10245
Antigen Region	38-65

Additional Information

Gene ID	1668
Other Names	Neutrophil defensin 3, Defensin, alpha 3, HNP-3, HP-3, HP3, HP 3-56, Neutrophil defensin 2, HNP-2, HP-2, HP2, DEFA3, DEF3
Target/Specificity	This DEFA3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 38-65 amino acids from the C-terminal region of human DEFA3.
Dilution	IHC-P-Leica~~1:500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	DEFA3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DEFA3
Synonyms	DEF3

Function	Effector molecule of the innate immune system that acts via antibiotic-like properties against a broad array of infectious agents including bacteria, fungi, and viruses (PubMed:15616305, PubMed:15772169, PubMed:17142766). Possesses the ability to neutralize bacterial toxins such as B.anthracis lethal factor, Clostridium difficile cytotoxin B as well as leukocidin produced by Staphylococcus aureus (PubMed:15772169, PubMed:18435932, PubMed:25963798). Also blocks herpes simplex virus infection by interacting with envelope glycoprotein B and thus preventing its binding to heparan sulfate, the receptor for attachment (PubMed:17142766).
Cellular Location	Secreted.

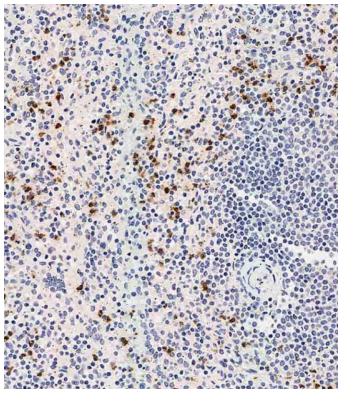
Background

Defensins are a family of microbicidal and cytotoxic peptides thought to be involved in host defense. They are abundant in the granules of neutrophils and also found in the epithelia of mucosal surfaces such as those of the intestine, respiratory tract, urinary tract, and vagina. Members of the defensin family are highly similar in protein sequence and distinguished by a conserved cysteine motif. The protein encoded by this gene, defensin, alpha 3, is found in the microbicidal granules of neutrophils and likely plays a role in phagocyte-mediated host defense. Several alpha defensin genes are clustered on chromosome 8. This gene differs from defensin, alpha 1 by only one amino acid. This gene and the gene encoding defensin, alpha 1 are both subject to copy number variation.

References

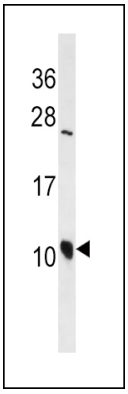
Han, S., et al. Hum. Immunol. 71(7):727-730(2010)
Chen, Q., et al. Anesthesiology 112(6):1428-1434(2010)
Rajaraman, P., et al. Cancer Epidemiol. Biomarkers Prev. 19(5):1356-1361(2010)
Paslakis, G., et al. Nephron Exp. Nephrol. 115 (4), E96-E100 (2010) :
Rodriguez-Garcia, M., et al. PLoS ONE 5 (2), E9436 (2010) :

Images



Immunohistochemical analysis of AP19266b on paraffin-embedded human spleen tissue was performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 15min at room temperature. Leica Bond Polymer Refine Detection was used as the secondary antibody.

DEFA3 Antibody (C-term)(Cat. #AP19266b) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the DEFA3 antibody detected the DEFA3 protein (arrow).



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