

Rabbit Anti-DEFB1/Beta-defensin 1 Polyclonal: RC0034

Intended Use: For Research Use Only

Description: 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 1, an antimicrobial peptide implicated in the resistance of epithelial surfaces to microbial colonization. This gene maps in close proximity to defensin family member, defensin, alpha 1 and has been implicated in the pathogenesis of cystic fibrosis. The mature form of Beta-defensin 1 is 36 amino acids. Beta-defensins (also designated BD, and hBD in human) are small cationic peptides with broad-spectrum antimicrobial activity. Produced in mucosal epithelia and neutrophils of several species, Beta-defensins are developmentally regulated. Research indicates that human Beta-defensin 1 may contribute to the antimicrobial activity of airway surface fluid and may play a role in the mucosal defenses of the lung. Human β -defensin 1 shares homology with other Beta-defensins from human blood filtrate and is also present in nanomolar concentrations in human plasma. In addition to the antimicrobial activity of human airway epithelia, Beta-defensin 1 may play a role in the mucosal defenses of the lung.

Specifications

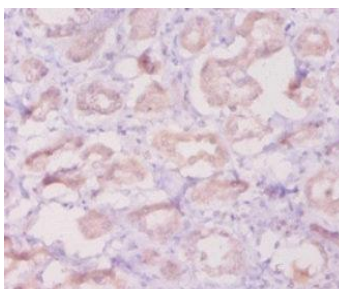
Clone:	Polyclonal
Source:	Rabbit
Isotype:	IgG
Reactivity:	Human
Immunogen:	Recombinant human Beta-defensin 1 protein aa 33-68
Localization:	Secreted
Formulation:	Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC, IF
Package:	

Description	Catalog No.	Size
DEFB1/Beta-defensin 1 Polyclonal Concentrated	RC0034	1 ml

IHC Procedure*

Positive Control Tissue:	Kidney, colon cancer
Concentrated Dilution:	10-50
Pretreatment:	Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
Incubation Time and Temp:	Overnight @ 4°C
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human kidney stained with anti-DEFB1 using DAB

References:

1. Tonsillar antimicrobial peptide (AMP) expression profiles of periodic fever, aphthous stomatitis, pharyngitis, cervical adenitis (PFAPA) patients. Gazi U, et al. Int J Pediatr Otorhinolaryngol 110:100-104, 2018.
2. Cigarette Smoke Modulates NOD1 Signal Pathway and Human β Defensins Expression in Human Oral Mucosa. Qian YJ, et al. Cell Physiol Biochem 36:457-73, 2015.