## Rabbit Anti-DEFB2/Beta-Defensin 2 Polyclonal: RC0050

Intended Use: For Research Use Only

**Description:** Beta-defensins are expressed on some leukocytes and at epithelial surfaces. In addition to their direct antimicrobial activities, they can act as chemoattractants towards immature dendritic cells and memory T cells. The beta-defensin proteins are expressed as the C-terminal portion of precursors, and are released by proteolytic cleavage of a signal sequence and, in some cases, a propeptide sequence. Beta-defensins contain a six-cysteine motif that forms three intra-molecular disulfide bonds. Beta-Defensin 2 or DEFB2 is a cystein-rich cationic 41 amino acid antimicrobial peptide of 4-5 kDa. Human DEFB2 is produced by epithelial cells upon stimulus by lipopolysaccharides and proinflammatory cytokines TNFalpha and IL1beta. Contact of keratinocytes with gram-negative bacteria results in rapid induction of DEFB2 protein. DEFB2 has been described as a dynamic component of the local epithelial defense system of the skin, intestinal and respiratory tract, where it functions by protecting surfaces from infection. Its local expression has been associated with skin lesions like psoriasis as well as infected lung epithelia of patients with cystic fibrosis.

S	pecifications:
D	pecifications.

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Clone:	Polyclonal		
Source:	Rabbit		
Isotype:	IgG		
Reactivity:	Human		
Immunogen:	Recombinant DEFB2 protein express	ssed in E.coli.	
Localization:	Secreted		
Formulation:	Purified antibody in PBS pH7.4, con	taining BSA and $\leq 0.09\%$ s	odium azide (NaN3)
Storage:	Store at 2°- 8°C		
Applications:	IHC, ELISA, IF, WB		
Package:			
Description		Catalog No.	Size
DEFB2/Beta-Det	Eensin 2 Polyclonal Concentrated	RC0050	1 ml

**IHC Procedure\*:** 

Positive Control Tissue:	Tonsil, kidney, stomach, colon and pancreas cancer
Concentrated Dilution:	10-50
Pretreatment:	Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp:	Overnight at 4°C
Detection:	Refer to the detection system manual
* Result should be confirmed by an e	stablished diagnostic procedure.



FFPE human pancreas cancer stained with anti-DEFB2 using AEC

## **References:**

- 1. Reconstructed Human Epidermis Predicts Barrier-Improving Effects of Lactococcus lactis Emulsion in Humans. Hausmann C, et al. Skin Pharmacol Physiol 32:72-80, 2019.
- 2. Human Beta Defensins and Cancer: Contradictions and Common Ground. Santosh K. Ghosh, et al. Oncol., 03 May 2019.

Doc. 100-RC0050 Rev. A