

## Datasheet for ABIN2192079

# anti-DEFA5 antibody





## Overview

OVEIVIEW		
Quantity:	100 μg	
Target:	DEFA5	
Reactivity:	Human	
Host:	Mouse	
Clonality:	Monoclonal	
Conjugate:	This DEFA5 antibody is un-conjugated	
Application:	Western Blotting (WB), Immunohistochemistry (Frozen Sections) (IHC (fro)), Immunoassay (IA)	
Product Details		
Clone:	8C8	
Sterility:	0.2 μm filtered	
Target Details		
Target:	DEFA5	
Alternative Name:	alpha-Defensin 5 (DEFA5 Products)	
Background:	The monoclonal antibody 8C8 recognizes human alpha-defensin 5 (HD5). HD5 is an	
	antimicrobial peptide produced by Paneth cells, specialized epithelial cells of the small	
	intestinal crypt. HD5 is stored in the Paneth cells as propeptide (aa 20-94) and released as	
	mature peptide after trypsin digestion, which is co-secreted from the Paneth cell granules. The	
	mature HD5 (aa 63-94) is protected from further digestion by the proteolysis enzyme. HD5	
	functions in maintaining the correct microbial balance in the intestine. Transgenic mice that	
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express HD5 are protected from lethal challenge caused by Salmonella typhimurium. Expression levels of HD5 are negatively correlated to intestinal infection. HD5 is a useful marker for intestinal metaplasia of the upper gastrointestinal tract. HD5 expression has also been detected in the upper half of the stratified squamous epithelium of the vagina and ectocervix with increasing intensity toward the lumen. Secreted HD5 is detectable in cervicovaginal lavages, with highest concentrations during the secretory phase of the menstrual cycle. The monoclonal antibody 8C8 was raised against recombinant HD5 (aa 20-94) and recognizes the propeptide and the partially processed forms (aa 36-94 and 56-94), but it hardly recognizes mature peptide. No cross reactivity with HD6, lysozyme, or sPLA2 could be detected. Aliases DEFA5

## **Application Details**

App	lication	Notes:

For immunohistology and Western blotting, dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

#### Restrictions:

For Research Use only

## Handling

Buffer:	PBS, containing 0.1 % bovine serum albumin and 0.02 % sodium azide.	
Preservative:	Sodium azide	
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.	
Storage:	4 °C	
Storage Comment:	Product should be stored at 4 °C. Under recommended storage conditions, product is stable for one year.	
Expiry Date:	12 months	

## **Publications**

#### Product cited in:

Kelly, Bajaj-Elliott, Katubulushi, Zulu, Poulsom, Feldman, Bevins, Dhaliwal: "Reduced gene expression of intestinal alpha-defensins predicts diarrhea in a cohort of African adults." in: **The Journal of infectious diseases**, Vol. 193, Issue 10, pp. 1464-70, (2006) (PubMed).

Shen, Porter, Reynoso, Shen, Ghosh, Connor, Drazba, Rho, Gramlich, Li, Ormsby, Sy, Ganz, Bevins: "Human defensin 5 expression in intestinal metaplasia of the upper gastrointestinal tract." in: **Journal of clinical pathology**, Vol. 58, Issue 7, pp. 687-94, (2005) (PubMed).

Kelly, Feakins, Domizio, Murphy, Bevins, Wilson, McPhail, Poulsom, Dhaliwal: "Paneth cell granule depletion in the human small intestine under infective and nutritional stress." in: **Clinical and experimental immunology**, Vol. 135, Issue 2, pp. 303-9, (2004) (PubMed).