

Datasheet for ABIN2192079

anti-DEFA5 antibody**3** Publications[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	DEFA5
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
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 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

Target Details

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

Application 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](#)).