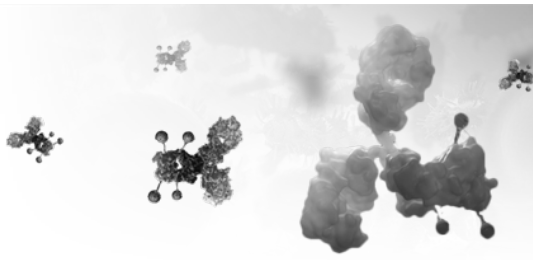

Mouse Anti-Human DEFA5 Monoclonal Antibody, clone 8C8 [Functional Grade] (CABT-Z658M)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Low endotoxin level (≤ 1.0 EU/mg) monoclonal antibody recognizes human alpha-defensin 5 (HD5). More Lower endotoxin level (≤ 0.5 EU/mg) antibody is also available.
Immunogen	Recombinant Human HD5 (aa 20-94).
Isotype	IgG2b, κ
Source/Host	Mouse
Species Reactivity	Human
Clone	8C8
Purification	Protein A or G purified
Conjugate	Functional Grade
Applications	Dot, ELISA, IHC, WB
Format	Liquid
Concentration	Lot specific
Size	1 mg
Buffer	0.01 M phosphate buffered saline (PBS) pH 7.2 - 7.4, 150 mM NaCl with no carrier protein, potassium, calcium or preservatives added. Endotoxin Level ≤ 1.0 EU/mg as determined by the LAL method

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221

Preservative	None
Storage	Functional grade biosimilar antibodies may be stored sterile as received at 2-8℃ for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at -80℃. Avoid Repeated Freeze Thaw Cycles.
Ship	Wet ice

BACKGROUND

Introduction	HD5 is highly expressed in the secretory granules of Paneth cells of the ileum. Six human α-defensins, a subfamily of defensin peptides characterized by their cysteine spacing and disulfide connectivity, have been identified. Human Paneth cells express α-defensin 5 (HD5) along with HD6. Paneth cells are most numerous in the ileum and have many features similar to those of myeloid cells. They are multifaceted cells with a large quantity of apically-located eosinophilic secretory granules containing lysozyme and other antimicrobial factors which are released upon bacterial stimulation. In addition, these cells express tumor necrosis factor alpha (TNF-a), CD1, and CD15. Paneth cells do not store defensins as fully processed or active peptides, rather they store them as inactive propeptides. They are released as mature peptides after trypsin digestion. Trypsin is also secreted from the Paneth cell granules. It has been reported that disrupted α-defensin processing in murine Paneth cells has initiated a vulnerability to enteric infection. HD5 expression levels have been found to be negatively correlated to intestinal infection. Additionally, studies have shown HD5 to be a strong antagonist towards human Papillomavirus infection. Furthermore, low expression of HD5 is thought to play a role in Crohn's disease.
Keywords	DEFA5;defensin, alpha 5, Paneth cell-specific;DEF5;defensin-5;HD 5;defensin 5

GENE INFORMATION

Gene Name	DEFA5
Entrez Gene ID	1670
UniProt ID	Q01523

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221