

Polyclonal Antibody to Defensin Alpha 6, Paneth Cell Specific (DEFa6)

Defensin Alpha 6, Paneth Cell Specific
Catalog # AP74620

Product Information

Application	WB
Primary Accession	Q01524
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	10975

Additional Information

Gene ID	1671
Other Names	DEF6; Defensin-6
Target/Specificity	Homo sapiens (Human)
Dilution	WB~~Western blotting: 0.5-2 μ g/mL;1:160-660 Immunohistochemistry: 5-20 μ g/mL;1:16-66 Immunocytochemistry: 5-20 μ g/mL;1:16-66 Optimal working dilutions must be determined by end user.
Format	0.01M PBS, pH7.4, containing 0.05% Proclin-300, 50% glycerol.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	DEFA6
Synonyms	DEF6
Function	Host-defense peptide that contributes to intestinal innate immunity and mediates homeostasis at mucosal surfaces by forming higher-order oligomers that capture bacteria and prevent microbial invasion of the epithelium (PubMed: 15616305 , PubMed: 17088326 , PubMed: 25158166 , PubMed: 25354318 , PubMed: 28026958). After binding to bacterial surface proteins, undergoes ordered self-assembly to form fibril-like nanonets that surround and entangle bacteria and thereby prevent bacterial invasion across the epithelial barrier (PubMed: 22722251). Entangles and agglutinates Gram-negative bacteria, such as E.coli, S.typhimurium and Y.enterocolitica, and Gram-positive bacteria such as L.monocytogenes, thereby protecting the

intestine against invasion by enteric bacterial pathogens (PubMed:[22722251](#), PubMed:[25158166](#), PubMed:[27076903](#)). Blocks adhesion of *C.albicans* to intestinal epithelial cells and thereby suppresses fungal invasion of epithelial cells and biofilm formation (PubMed:[28026958](#)). Under reducing conditions and in an acidic environment similar to the intestinal milieu, exhibits inhibitory activity against anaerobic bacteria such as *B.adolescentis*, *L.acidophilus* and *B.breve*, as well as *B.longum* and *S.thermophilus*, possibly by leading to alterations in bacterial cell envelope structures (PubMed:[25354318](#)). The disulfide- linked oxidized form exhibits negligible antimicrobial activity against Gram-negative and Gram-positive bacteria, as compared to the enteric defensin DEFA5 (PubMed:[15616305](#), PubMed:[17088326](#)).

Cellular Location

Secreted. Cytoplasmic vesicle, secretory vesicle Note=Stored as propeptide in secretory granules of small intestinal Paneth cells and found in the ileum lumen as mature peptide

Tissue Location

Expressed in Paneth cells of the small intestine (at protein level).

Images

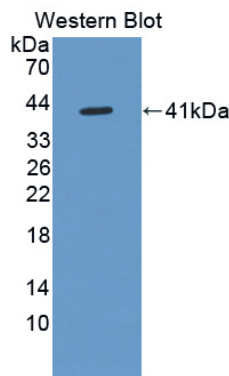


Figure. Western Blot; Sample: Recombinant DEFA6, Human.

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