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Anti-Alpha Defensin 1 Picoband Antibody

Catalog # ABO10346

Product Information

Application	WB
Primary Accession	P59665
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Neutrophil defensin 1(DEFA1) detection. Tested with WB in Human;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	1667;728358
Other Names	Neutrophil defensin 1, Defensin, alpha 1, HNP-1, HP-1, HP1, HP 1-56, Neutrophil defensin 2, HNP-2, HP-2, HP2, DEFA1, DEF1, DEFA2, MRS
Calculated MW	10201
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Rat
Subcellular Localization	Secreted.
Source	Eukaryota
Protein Name	Neutrophil defensin 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Alpha Defensin 1 (65-94aa ACYCRIPACIAGERRYGTCIYQGRLWAFCC).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

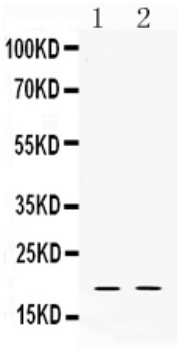
Protein Information

Name	DEFA1
Synonyms	DEF1, DEFA2, MRS
Function	Effector molecule of the innate immune system that acts via antibiotic-like properties against a broad array of infectious agents including bacteria, fungi, and viruses or by promoting the activation and maturation of some APCs (PubMed:15616305, PubMed:17142766, PubMed:20220136, PubMed:24236072). Interacts with the essential precursor of cell wall synthesis lipid II to inhibit bacterial cell wall synthesis (PubMed:20214904). Inhibits adenovirus infection via inhibition of viral disassembly at the vertex region, thereby restricting the release of internal capsid protein pVI, which is required for endosomal membrane penetration during cell entry (PubMed:18191790). In addition, interaction with adenovirus capsid leads to the redirection of viral particles to TLR4 thereby promoting a NLRP3-mediated inflammasome response and interleukin 1-beta (IL-1beta) release (PubMed:35080426). Induces the production of proinflammatory cytokines including type I interferon (IFN) in plasmacytoid dendritic cells (pDCs) by triggering the degradation of NFKBIA and nuclear translocation of IRF1, both of which are required for activation of pDCs (PubMed:27031443).
Cellular Location	Secreted.

Background

Defensin, alpha 1, also known as human alpha defensin 1, human neutrophil peptide 1 (HNP-1) or neutrophil defensin 1 is a human protein that is encoded by the DEFA1 gene. Defensins are a family of antimicrobial and cytotoxic peptides thought to be involved in host defense. They are abundant in the granules of neutrophils and also found in the epithelia of mucosal surfaces such as those of the intestine, respiratory tract, urinary tract, and vagina. Members of the defensin family are highly similar in protein sequence and distinguished by a conserved cysteine motif. The protein encoded by this gene, defensin, alpha 1, is found in the microbicidal granules of neutrophils and likely plays a role in phagocyte-mediated host defense. Several alpha defensin genes are clustered on chromosome 8. This gene differs from defensin, alpha 3 by only one amino acid. This gene and the gene encoding defensin, alpha 3 are both subject to copy number variation.

Images



Western blot analysis of Alpha Defensin 1 expression in rat testis extract (lane 1) and HELA whole cell lysates (lane 2). Alpha Defensin 1 at 19KD was detected using rabbit anti- Alpha Defensin 1 Antigen Affinity purified polyclonal antibody (Catalog #ABO10346) at 0.5 □¼g/mL. The blot was developed using chemiluminescence (ECL) method .

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