

DEFA1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22368c

Product Information

Application WB, E **Primary Accession** P59665 Reactivity Human **Predicted** Human Host Rabbit Clonality polyclonal Isotype Rabbit IgG **Clone Names** RB57879 **Calculated MW** 10201

Additional Information

Gene ID 1667;728358

Other Names Neutrophil defensin 1, Defensin, alpha 1, HNP-1, HP-1, HP 1-56,

Neutrophil defensin 2, HNP-2, HP-2, HP2, DEFA1, DEFA1, DEFA2, MRS

Target/Specificity This DEFA1 antibody is generated from a rabbit immunized with a KLH

conjugated synthetic peptide between 28-62 amino acids from the Central

region of human DEFA1.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions DEFA1 Antibody (Center) is for research use only and not for use in diagnostic

or therapeutic procedures.

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.

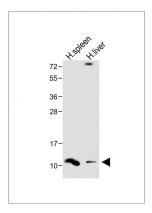
Background

Defensin 1 and defensin 2 have antibacterial, fungicide and antiviral activities. Has antimicrobial activity against Gram- negative and Gram-positive bacteria. Defensins are thought to kill microbes by permeabilizing their plasma membrane.

References

Daher K.A., et al. Proc. Natl. Acad. Sci. U.S.A. 85:7327-7331(1988). Mars W.M., et al. Blood 71:1713-1719(1988). Wiedemann L.M., et al. Leukemia 3:227-234(1989). Mars W.M., et al.J. Biol. Chem. 270:30371-30376(1995). Linzmeier R., et al. FEBS Lett. 321:267-273(1993).

Images



All lanes: Anti-DEFA1 Antibody (Center) at 1:1000 dilution Lane 1: Human spleen lysate Lane 2: Human liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 10 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.