

DATASHEET

Defensin alpha 1 Rabbit Polyclonal Antibody

CAT. NO. APA08846

KEY FEATURES

Target	Defensin alpha 1	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat	Clonality	Polyclonal
Applications	WB, IHC, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

BACKGROUND

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 . Interacts with the essential precursor of cell wall synthesis lipid II to inhibit bacterial cell wall synthesis . 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 . 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-1 beta) release .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:200
IF/ICC	1:50 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Rabbit polyclonal antibody to Defensin alpha 1
Specificity	Recognizes endogenous levels of Defensin alpha 1 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Defensin alpha 1. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 10 kD; Observed: 15 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	DEF1; DEFA2; MRS; Neutrophil defensin 1; Defensin, alpha 1; HNP-1; HP-1; HP1
Gene Symbol	DEFA1
Entrez Gene	1667; 728358(Human)
SwissProt	P59665(Human)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

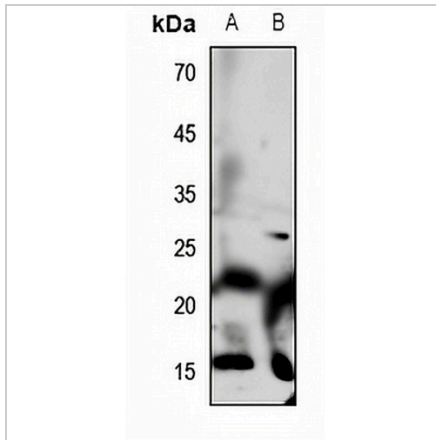
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

DATASHEET

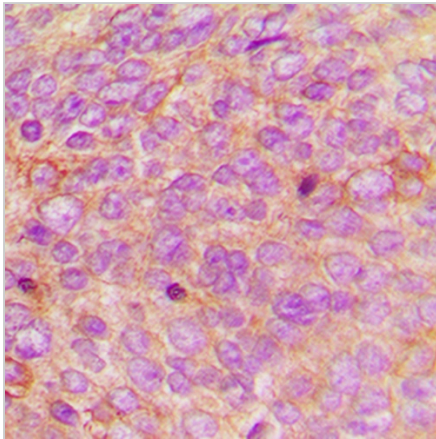
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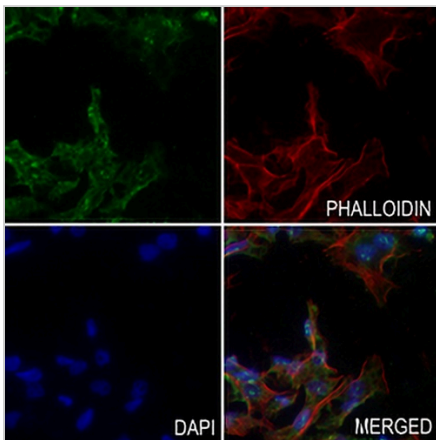
DATA



Western blot analysis of Defensin alpha 1 expression in mouse spleen (A), rat spleen (B) whole cell lysates. (Predicted band size: 10 kD; Observed band size: 15 kD)



Immunohistochemical analysis of Defensin alpha 1 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Defensin alpha 1 staining in HuH7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.