

DATASHEET

Defensin beta 2 Rabbit Polyclonal Antibody

CAT. NO. APA08509

KEY FEATURES

Target	Defensin beta 2	Source / Host	Rabbit
Reactivity	Human	Clonality	Polyclonal
Applications	WB, 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

Exhibits antimicrobial activity against Gram-negative bacteria and Gram-positive bacteria, with highest activity against Gram-negative bacteria . Antimicrobial activity against P.aruginosa seems to be salt-sensitive and is reduced with high salt concentrations greater than 25 mM . Also exhibits antimicrobial activity against the yeast C.albicans . Permeabilizes C.albicans cell membranes via targeting plasma membrane lipid phosphatidylinositol 4,5-bisphosphate (PIP2), thereby leading to cell fragmentation and cell death . Acts as a ligand for C-C chemokine receptor CCR6 . Binds to CCR6 and induces chemotactic activity of CCR6-expressing cells, such as immature dendritic cells and memory T cells .

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
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 beta 2
Specificity	Recognizes endogenous levels of Defensin beta 2 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human Defensin beta 2. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 7 kD; Observed: 7 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	DEFB102; DEFB2; DEFB4; Beta-defensin 4A; Beta-defensin 2; BD-2; hBD-2; Defensin, beta 2; Skin-antimicrobial peptide 1; SAP1
Gene Symbol	DEFB4A; DEFB4B
Entrez Gene	100289462; 1673(Human)
SwissProt	O15263(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.

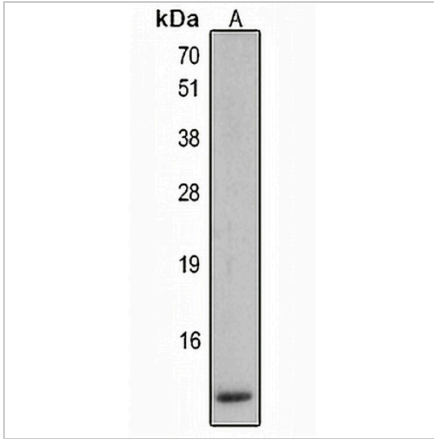
*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

DATASHEET

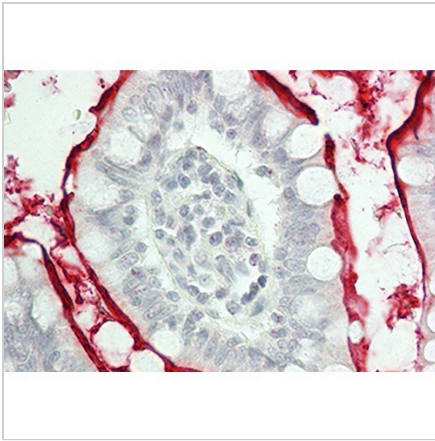
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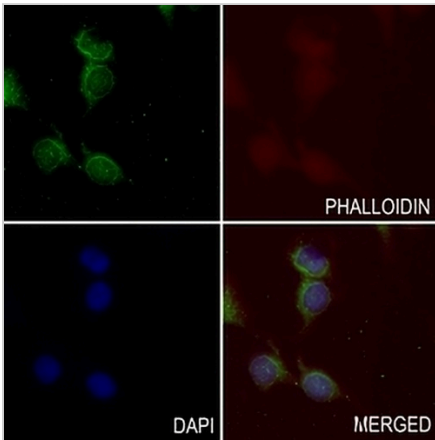
DATA



Western blot analysis of Defensin beta 2 expression in HEK293T (A) whole cell lysates. (Predicted band size: 7 kD; Observed band size: 7 kD)



Immunohistochemical analysis of Defensin beta 2 staining in human small intestine 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. AEC was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of Defensin beta 2 staining in A549 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.