

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human α -Defensin 1 in direct ELISAs.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human α -Defensin 1 Ala65-Cys94 Accession # P59665
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μ m filtered solution in PBS.

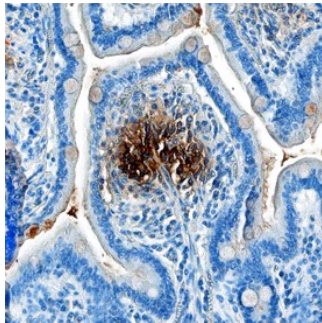
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Immunohistochemistry	5-15 μ g/mL	See Below
ELISA	This antibody functions as an ELISA detection antibody when paired with Mouse Anti-Human α -Defensin 1 Monoclonal Antibody (Catalog # MAB8198). <i>This product is intended for assay development on various assay platforms requiring antibody pairs. We recommend the Human alpha-Defensin 1 DuoSet ELISA Kit (Catalog # DY8198-05) for convenient development of a sandwich ELISA.</i>	

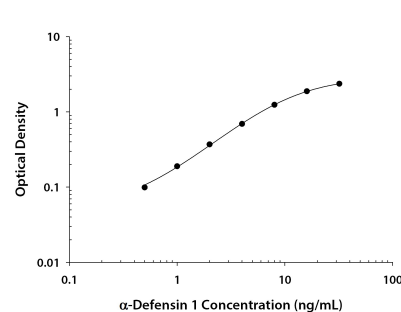
DATA

Immunohistochemistry



α -Defensin 1 in Human Small Intestine.
 α -Defensin 1 was detected in formalin fixed paraffin-embedded sections of human small intestine using Sheep Anti-Human α -Defensin 1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8198) at 1 μ g/mL overnight at 4 °C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # [CTS019](#)) and counterstained with hematoxylin (blue). Specific staining was localized to lamina propria in intestinal villi. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

ELISA



Human α -Defensin 1 ELISA Standard Curve. Recombinant Human α -Defensin 1 protein was serially diluted 2-fold and captured by Mouse Anti-Human α -Defensin 1 Monoclonal Antibody (Catalog # [MAB8198](#)) coated on a Clear Polystyrene Microplate (Catalog # [DY990](#)). Sheep Anti-Human α -Defensin 1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8198) was biotinylated and incubated with the protein captured on the plate. Detection of the standard curve was achieved by incubating Streptavidin-HRP (Catalog # [DY998](#)) followed by Substrate Solution (Catalog # [DY999](#)) and stopping the enzymatic reaction with Stop Solution (Catalog # [DY994](#)).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Human Defensin alpha 1 (DEFA1) is 94 amino acids (aa) in length and is cleaved into the following chains: HP 1-56 (aa 39-94), Neutrophil defensin 1 (aa 65-94) and Neutrophil defensin 2 (aa 66-94). Defensins are secreted peptides that kill microbes by permeabilizing their plasma membrane. DEFA1 has antimicrobial activity against Gram-negative and Gram-positive bacteria. ADP-ribosylation reduces cytotoxic and antibacterial activities, it is also known to enhance IL8 production. Phosphorylation at Tyr-85 is reported in several cancer cell lines and interferes with ADP-ribosylation of DEFA1.