

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human $\alpha$ -Defensin 1 in direct ELISAs.
<b>Source</b>	Recombinant Monoclonal Mouse IgG <sub>1</sub> Clone # 867919R
<b>Purification</b>	Protein A or G purified from cell culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human $\alpha$ -Defensin 1 Ala65-Cys94 Accession # P59665
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ 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 $\mu$ m filtered solution in PBS.

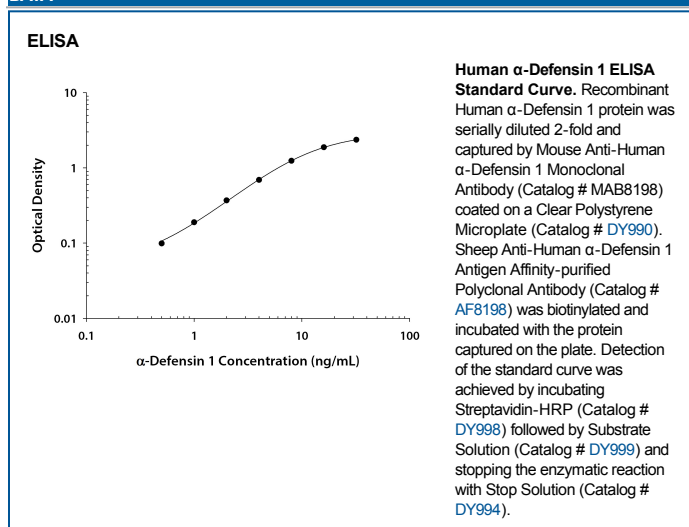
## APPLICATIONS

**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.

**ELISA** This antibody functions as an ELISA capture antibody when paired with Sheep Anti-Human  $\alpha$ -Defensin 1 Antigen Affinity-purified Polyclonal Antibody (Catalog # [AF8198](#)).

*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.*

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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.