

#### DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human $\alpha$ -Defensin 1 in direct ELISAs.                                                                                                                                                                                                                        |
| <b>Source</b>             | 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<br>Ala65-Cys94<br>Accession # P59665                                                                                                                                                                         |
| <b>Conjugate</b>          | Alexa Fluor 750<br>Excitation Wavelength: 749 nm<br>Emission Wavelength: 775 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

#### 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** Optimal dilution of this antibody should be experimentally determined.

#### PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

#### 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.

#### PRODUCT SPECIFIC NOTICES

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