



BMA BIOMEDICALS



Peninsula Laboratories

---

## S-1333

### Defensin $\alpha$ 1-3 (HNP-1, -2, -3) (human) ELISA

Defensins are a large family of small, cationic, cysteine- and arginine-rich antimicrobial peptides. They are divided into five groups according to the spacing pattern of cysteines: plant, invertebrate,  $\alpha$ -,  $\beta$ -, and  $\theta$ -defensins. Defensins are abundant in the granules of neutrophils and also found in the epithelia of mucosal surfaces such as those of the intestine, respiratory tract, urinary tract, and vagina. Members of the defensin family are highly similar in protein sequence and distinguished by a conserved cysteine motif. Several alpha defensin genes are clustered on chromosome 8. The protein encoded by this gene, defensin, alpha 1, is found in the microbicidal granules of neutrophils and likely plays a role in phagocyte-mediated host defense. It differs from the defensins, alpha 2 and alpha 3 by only one amino acid.

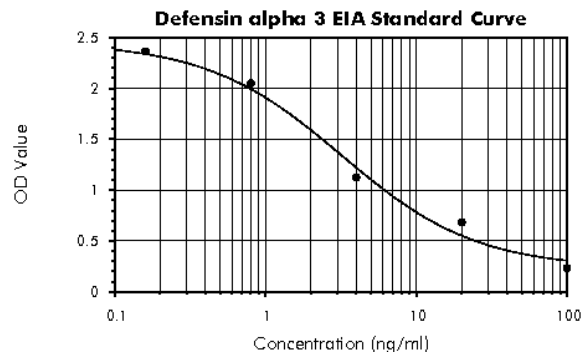
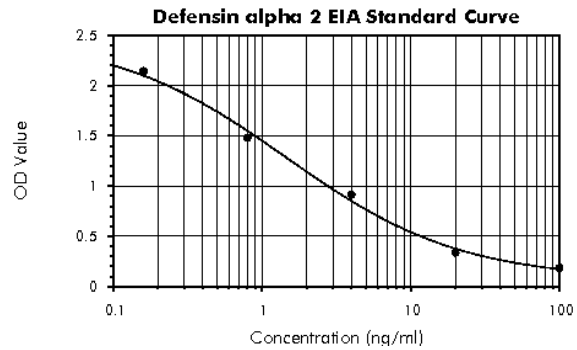
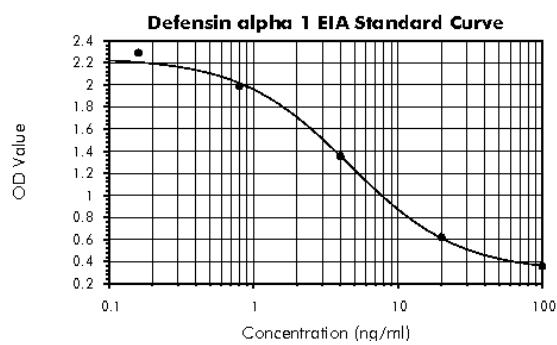
This ELISA was developed with serum from rabbits immunized with Defensin  $\alpha$ 1-3 coupled to a carrier protein.

---

#### TECHNICAL AND ANALYTICAL CHARACTERISTICS

<b>Lot number:</b>	A16393
<b>Host species:</b>	Rabbit IgG
<b>Quantity:</b>	96 tests
<b>Format:</b>	Formulated for extracted samples (EIAH type).
<b>Shelf-life:</b>	One year from production date. Store refrigerated at 4° - 8°C.
<b>Applications:</b>	This ELISA has been validated with the included reagents. It is intended to be used with appropriately extracted samples (original protocol III, Std.Ab1hr.Bt). For research use only. Please see <a href="http://www.bma.ch">www.bma.ch</a> for protocols and general information.
<b>Range:</b>	0-100ng/ml
<b>Average IC50:</b>	4.6ng/ml
<b>Immunogen:</b>	Synthetic peptide H-Asp-Cys-Tyr-Cys-Arg-Ile-Pro-Ala-Cys-Ile-Ala-Gly-Glu-Arg-Arg-Tyr-Gly-Thr-Cys-Ile-Tyr-Gln-Gly-Arg-Leu-Trp-Ala-Phe-Cys-Cys-OH coupled to carrier protein.

Typical titration curve of Defensin  $\alpha$ 1-3 in a competitive ELISA with this antibody:



<b>Suggested Preparation of Standards</b>		
	<b>ng/ml</b>	Range: 0.10 to 100ng/ml
<b>Stock</b>	1000	
<b>S1</b>	100.00	Add 100 $\mu$ l Stock + 900 $\mu$ l diluent
<b>S2</b>	25.00	Add 200 $\mu$ l S1 + 600 $\mu$ l diluent
<b>S3</b>	6.25	Add 200 $\mu$ l S2 + 600 $\mu$ l diluent
<b>S4</b>	1.56	Add 200 $\mu$ l S3 + 600 $\mu$ l diluent
<b>S5</b>	0.39	Add 200 $\mu$ l S4 + 600 $\mu$ l diluent
<b>S6</b>	0.10	Add 200 $\mu$ l S5 + 600 $\mu$ l diluent
<b>S0</b>	0.00	500 $\mu$ l diluent

This product contains Thimerosal as a preservative and is intended for laboratory use and research purposes only. Purchase of this product does not include authorization to use it in diagnostic or therapeutic applications.

S-1333

EIAH

1.3.2021