

Porcine NT-ProBNP ELISA Kit

Cat#: orb554415 (CoA)

Product Name:

Porcine N-Terminal Pro Brain Natriuretic Peptide (NT-ProBNP) ELISA Kit

Cat. No.:

orb554415

Organism:

Sus scrofa; Porcine; Pig

Introduction

Item	Standard	Test Result																				
Description	The kit is a sandwich enzyme immunoassay technique for the in vitro quantitative measurement of NT-ProBNP in porcine serum, plasma or other biological fluids.	Confirm																				
Identification	Colorimetric	Positive																				
Composition	<table border="0"> <tr> <td>Pre-coated, ready to use 96-well strip plate</td> <td>1</td> </tr> <tr> <td>Standard (freeze dried)</td> <td>2</td> </tr> <tr> <td>Standard Diluent</td> <td>1 ×20ml</td> </tr> <tr> <td>Detection Solution A</td> <td>1 ×12ml</td> </tr> <tr> <td>Detection Solution B</td> <td>1 ×12ml</td> </tr> <tr> <td>TMB Substrate</td> <td>1 × 9ml</td> </tr> <tr> <td>Stop Solution</td> <td>1 ×6ml</td> </tr> <tr> <td>Wash Buffer (30 x concentrate)</td> <td>1 ×20ml</td> </tr> <tr> <td>Plate sealer for 96 wells</td> <td>2</td> </tr> <tr> <td>Instruction manual</td> <td>1</td> </tr> </table>	Pre-coated, ready to use 96-well strip plate	1	Standard (freeze dried)	2	Standard Diluent	1 ×20ml	Detection Solution A	1 ×12ml	Detection Solution B	1 ×12ml	TMB Substrate	1 × 9ml	Stop Solution	1 ×6ml	Wash Buffer (30 x concentrate)	1 ×20ml	Plate sealer for 96 wells	2	Instruction manual	1	Confirm
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Assay Range	15.6-1000pg/mL	Confirm																				

Sensitivity

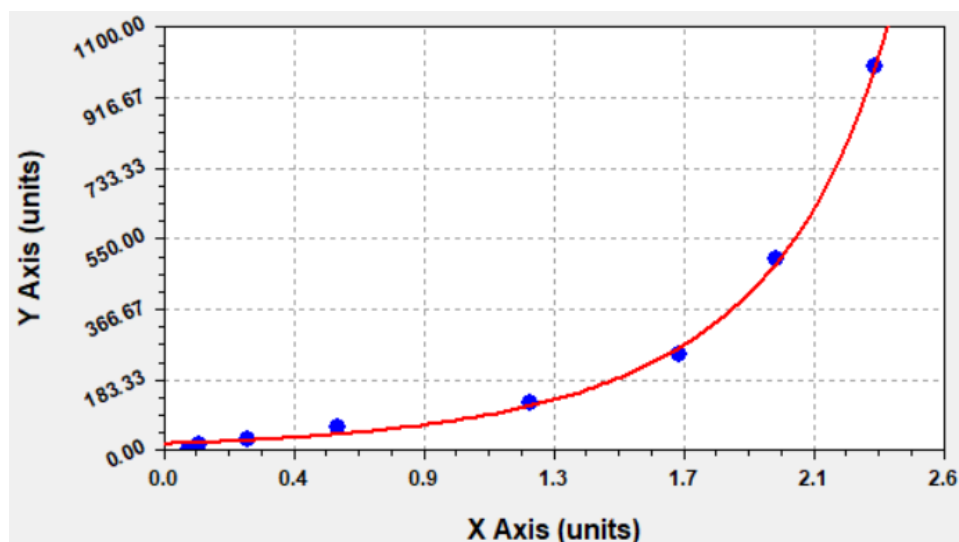
The minimum detectable dose of porcine NT-ProBNP is typically less than 6.93pg/mL.

The sensitivity of this assay, or Lower Limit of Detection (LLD) was defined as the lowest protein concentration that could be differentiated from zero. It was determined by adding two standard deviations to the mean optical density value of twenty zero standard replicates and calculating the corresponding concentration.

Standard curve

The standard curve is provided for demonstration only. The user should perform a standard test in each independent experiment.

pg/mL	Standard		Average	Corrected
0	0.089	0.091	0.09	---
15.6	0.125	0.131	0.128	0.038
31.2	0.287	0.281	0.284	0.194
62.5	0.561	0.602	0.5815	0.4915
125	1.203	1.212	1.2075	1.1175
250	1.689	1.703	1.696	1.606
500	2.031	2.001	2.016	1.926
1000	2.323	2.354	2.3385	2.2485



Recovery

Matrices listed below were spiked with certain level of recombinant porcine NT-ProBNP and the recovery rates were calculated by comparing the measured value to the expected amount of NT-ProBNP in samples.

Matrix	Recovery range (%)	Average (%)
serum(n=5)	78-92%	85%
EDTA plasma(n=5)	89-95%	92%
heparin plasma(n=5)	91-103%	97%

Linearity

The linearity of the kit was assayed by testing samples spiked with appropriate concentration of porcine NT-ProBNP and their serial dilutions. The results were demonstrated by the percentage of calculated concentration to the expected.

Sample	1: 2	1: 4	1: 8	1: 16
serum(n=5)	79-88%	87-102%	91-99%	78-86%
EDTA plasma(n=5)	81-91%	92-102%	91-102%	80-89%
heparin plasma(n=5)	85-100%	85-95%	84-98%	85-100%

Precision

Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level porcine NT-ProBNP were tested 20 times on one plate, respectively.

Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level porcine NT-ProBNP were tested on 3 different plates, 8 replicates in each plate.

$$CV(\%) = SD/\text{mean} \times 100$$

Sample	Intra-assay Precision			Inter-assay Precision		
	1	2	3	1	2	3
n	20	20	20	8	8	8
Mean (pg/ml)	273.18	452.27	927.71	123.35	457.93	966.61
SD	19.97	33.02	63.27	7.44	32.70	72.11
CV (%)	7.31	7.30	6.82	6.03	7.14	7.46