Certification Of Analysis

Product Name：Pig Prolactin (PRL) ELISA Kit

Catalog Number: AAA13260

Species Reactivity: Pig (Sus scrofa; Porcine)

Lot No: L09TPR17 **Exp:** Mar 16, 2021

Introduction

Item	Standard		Test Result
Description	For the quantitative detection of Pig Prolactin (PRL) concentration in serum, plasma and other biological fluids.		Conform
Identification	Sandwich		Positive
Composition	Assay plate (96 Wells) Standard (lyophilized) Sample Diluent Biotin-Conjugate (concentrate 100 x) Biotin-Conjugate Diluent Streptavidin-HRP (concentrate 100 x) Streptavidin-HRP Diluent Substrate Solution Stop Solution Wash Buffer (concentrate 25 x) Adhesive Films Instruction manual	1 2 1 × 20 mL 1 × 120 µL 1 × 20 mL 1 × 120 µL 1 × 20 mL 1 × 12 mL 1 × 10 mL 1 × 20 mL 4 1	Conform
Assay Range	1.56-100 ng/mL		Conform

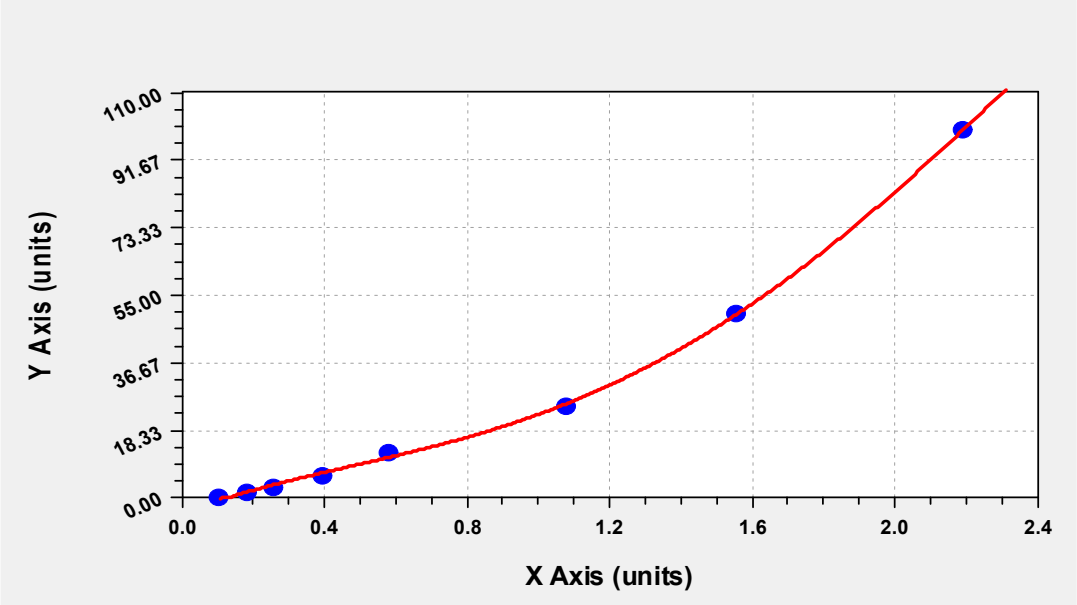
Sensitivity

The limit of detection of Pig PRL defined as the analyte concentration resulting in an absorbance significantly higher than that of the dilution medium (mean plus 2 standard deviations) was determined to be 1 ng/mL (mean of 6 independent assays).

Typical data

For convenience in result calculation, absorbance as abscissa and standard concentrations can be used as ordinate. The standard curve provided in the manual is only for reference, experimenters should draw the standard curve based on data of themselves.

ng/mL	Standard		Average
100	2.134	2.209	2.172
50	1.513	1.570	1.542
25	1.082	1.065	1.074
12.5	0.608	0.561	0.585
6.25	0.443	0.356	0.400
3.12	0.276	0.257	0.267
1.56	0.217	0.167	0.192
0	0.120	0.110	0.115



4th Degree Polynomial Fit: y=a+bx+cx^2+dx^3...

Coefficient Data:

a = -4.52660860105E+000

b = 3.83349248364E+001

c = -3.52300140100E+001

d = 2.94420796960E+001

e = -5.13079431926E+000

Recovery

The recovery of Pig PRL spiked to levels throughout the range of the assay was evaluated.

Sample Type	Number	Recovery range (%)	Average(%)
Pig serum	10	90-96	93
Pig plasma	10	92-98	95

Linearity

To assess the linearity of the assay, samples containing high concentrations of Pig PRL were serially diluted with Sample Diluent to produce samples with values within the dynamic range of the assay.

Sample Type	1：2	1：4	1：8	1：16
Pig serum	90-95%	92-98%	91-95%	89-94%
Pig plasma	89-93%	91-96%	90-94%	94-100%

Precision

Intra-assay Precision (Precision within an assay)
Three samples of known concentration were tested twenty times on one plate to assess intra-assay precision.
Inter-assay Precision (Precision between assays)
Three samples of known concentration were tested in forty separate assays to assess inter-assay precision.
CV (%) = SD/meanX100

	Intra-assay Precision			Inter-assay Precision		
Sample	1	2	3	1	2	3
n	20	20	20	20	20	20
Mean (ng/mL)	0.243	0.602	0.884	0.287	0.763	1.075
SD	0.016	0.043	0.066	0.021	0.060	0.094
CV (%)	6.6	7.1	7.5	7.3	7.9	8.7

Date: *2020.09.17*