

## Certificate of Analysis

**Product Name: High Sensitive ELISA Kit for Fibroblast Growth Factor 15 (FGF15)**

**Cat.No.AAA21070    Organism: Mus musculus (Mouse)**

### Introduction

Item	Standard		Test Result
Description	This immunoassay kit allows for the specific measurement of FGF15 concentration in mouse serum, plasma, tissue homogenates, cell lysates, cell culture supernates and other biological fluids.		Conform
Identification	Colorimetric		Positive
Composition	Pre-coated, ready to use 96-well strip plate Standard (freeze dried) Standard Diluent Detection Reagent A (green) Detection Reagent B (red) Assay Diluent A Assay Diluent B TMB Substrate Stop Solution Wash Buffer(30 x concentrate) Plate sealer for 96 wells Instruction manual	1 2 1 × 20ml 1× 120µl 1× 120µl 1 × 12ml 1 × 12ml 1 × 9ml 1 × 6ml 1 × 20ml 4 1	Conform
Assay Range	6.25-100pg/mL		Conform

### Sensitivity

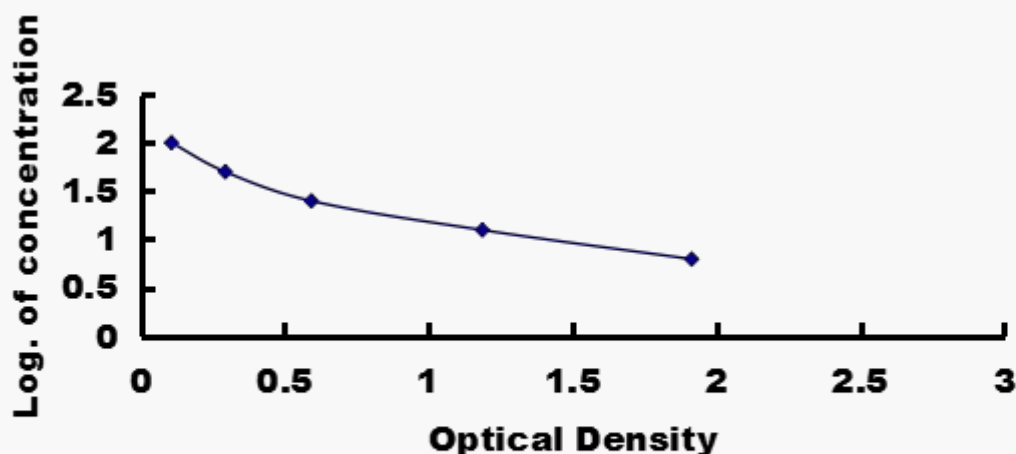
The minimum detectable dose of mouse FGF15 is typically less than 2.52pg/mL.

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 the mean O.D. Value of 20 replicates of the zero standard added by their three standard deviations.

### Standard curve

The standard curve is provided for demonstrated only. The client should perform the standard test in each independent experiment.


pg/ml	Standard		Average	Log of concentration
6.25	1.933	1.894	1.914	0.796
12.5	1.182	1.192	1.187	1.097
25	0.576	0.609	0.593	1.398
50	0.295	0.293	0.294	1.699
100	0.103	0.111	0.107	2.000



## Recovery

Different matrices were spiked with certain level of mouse FGF15 and the recovery rates were evaluated.

Matrix	Recovery range (%)	Average(%)
mouse serum(n=5)	80-92	86
mouse EDTA plasma(n=5)	94-105	101
mouse heparin plasma(n=5)	79-92	86

## Linearity

The linearity of the kit was assayed by testing samples spiked with high concentration of mouse FGF15 and also several dilutions of these samples. The results were demonstrated by the percentage of calculated concentration to the expected.

Sample	1: 2	1: 4	1: 8	1: 16
mouse serum(n=5)	85-101%	81-93%	88-106%	79-90%
mouse EDTA plasma(n=5)	91-102%	80-91%	82-90%	86-105%
mouse heparin plasma(n=5)	80-94%	78-105%	85-96%	81-95%

## Precision

Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level of mouse FGF15 were tested 20 times on one plate, respectively.

Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level of mouse FGF15 were tested on 3 different plates, 8 replicates in each plate.

	Intra-assay Precision			Inter-assay Precision		
Sample	1	2	3	1	2	3
n	20	20	20	24	24	24
Mean (pg/ml)	8.37	25.36	73.51	8.44	27.84	72.46
SD	0.604	1.698	4.640	0.631	1.981	5.016
CV (%)	7.2	6.7	6.3	7.5	7.1	6.9

Approved Date: 2017.4.11