### 36009- Equine insulin immunoassay kit

### Introduction of molecule

Insulin is a hormone synthesized by the β cells of pancreatic islets. It consists of two amino acid chains, A chain and B chain, linked with a sulphide bond. The A chain is made of 21 amino acids and B chain with 30 amino acids. Insulin has a molecular weight of 5.8KDa1.

**Performance and characteristics of assay**

**A. Typical representation of standard curve**

The following standard curve is provided for demonstration only. A standard curve should be generated for each assay.

|  |  |  |
| --- | --- | --- |
| Insulin (µU/ml) | Absorbance (450 nm) | Blanked Absorbance |
| 0 | 0.052 | 0 |
| 3 | 0.074 | 0.022 |
| 6 | 0.114 | 0.062 |
| 12 | 0.226 | 0.174 |
| 25 | 0.549 | 0.497 |
| 50 | 1.189 | 1.137 |
| 120 | 2.705 | 2.653 |



**B. Sensitivity**

The lowest insulin level that can be measured by this assay is 3µU/ml.

**C. Precision**

 Intra-assay Precision (Precision within an assay) C.V. < 10%.

 Inter-assay Precision (Precision between assays) C.V. <10%.

**D. Recovery**

The recovery of the assay was determined by adding various amounts insulin to a sample. The measured concentration of the spiked sample in the assay was compared to the expected concentration. The average recovery was 92%.

**E. Specificity:** Will update soon

### F. Sample : Serum and plasma

### G. Storage: 4°C

**References**

1. Mane K et al.,(2012) *J Basic Clin Pharm 3(2):283-293*