Ultra Sensitive Mouse Insulin ELISA Kit



[Intended Use]

The Ultra Sensitive Mouse Insulin ELISA kit is for the quantitative determination of insulin in Mouse serum, plasma, and fluid. Please read the complete kit insert before performing this assay. The kit is for *RESEARCH USE ONLY*. It is not intended for use in clinical or diagnostic procedures or for internal or external use in humans or animals.

[Introduction]

Insulin is the primary hormone produced in the β cells of the Islets of Langerhans, and is known not only to regulate glucose metabolism, *i.e.* the uptake of blood glucose to the liver and peripheral tissues, but also play other important physiological roles.

Recent increases in the incidence of diabetes and obesity have stimulated intensive research on insulin levels and production. As a result, the accurate measurement of insulin in experimental animals is becoming increasingly important. The kit is a simple, precise, and sensitive ELISA sandwich assay for mouse insulin.

(Assay flow)

Preparation of standard and samples



Dispense 95µL of Sample Diluent per well. Pipette 5µL of the sample (or working mouse insulin standard) per well.

First reaction



4°C, 2 hours.

Second reaction



Room Temperature, 30minutes.

Enzyme reaction



Room Temperature, 40minutes in dark. Stop enzyme reaction.

Measurement of absorbance

[Precision]

The intra-assay precision (C.V.) : \leq 10 % The inter-assay precision (C.V.) : \leq 10 % The Lot to Lot precision (C.V.) : \leq 10 %

Morinaga BioScience, Inc.

[Characteristics of Kit]

• Sample size Only 5µL

Sample

Serum, plasma, or fluid

Test

96 wells (8 wells x 12 modules)

Reagents

In liquid form (except standard)

• Assay range

0.1-6.4ng/mL, 0.1-12.8ng/mL*

* Intended for screening purpose

Assay time

Same day procedure

Recovery

When mouse insulin was spiked to mouse serum, the recovery of mouse insulin was $100\% \pm 10\%$

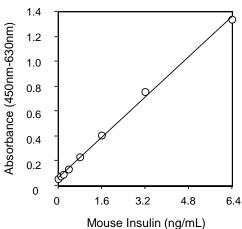
[Specificity]

Substance	Reactivity		
Mouse Insulin	100%		
Rat Insulin	100%*		
Hamster Insulin	Detected*		
Rat C-peptide	Not Detected		
Rat pancreatic polypeptide	Not Detected		
Porcine glucagon	Not Detected		
Human Insulin like growth factor-I	Not Detected		
Human Insulin like growth factor-II Not Detecte			

^{*}Can vary from lot to lot.

Additional specificity data are available. In need, please contact to Morinaga BioScience, Inc.

[Typical Standard]



	Name of component	Content	Quantity
А	Antibody-coated microplate module (One module consists of 8 wells)	6 modules / pack	2 packs
В	Mouse Insulin Standard, Lyophilized	2.56ng/vial	1 vial
С	Anti-Insulin Enzyme Conjugate Stock Solution	8 mL	1 bottle
D	Enzyme Conjugate Diluent	4 mL	1 bottle
Е	Enzyme Substrate (TMB) Solution*	13 mL	1 bottle
F	Enzyme Reaction Stop Solution (1 N Sulfuric Acid)	13 mL	1 bottle
G	Sample Diluent	30 mL	1 bottle
Н	Wash Buffer Stock Solution (20X Concentrate)	50 mL	1 bottle
	Frame for affixing the microplate well module		1 piece
	Plastic microplate cover		1 piece

TMB solution*: Avoid exposure to light.

(Other required reagents and instruments)

Micropipettes and disposable tips

Volumetric flasks

Distilled or deionized water

Polypropylene microtubes

Test tube racks

Vortex mixer

Aspirator for washing procedure

Microplate reader

(capable of measuring A450 and A630 values)

[Contact us]

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