Heat-treated Bovine Protein ELISA Kit Ver.2

Qualitative assay for determining Bovine MBM (meat and bone meal) in feed.

High sensitivity

- Our kit can detect **0.1 % bovine MBM in feed** which is processed under high temperature (135°C) and pressure.

High specificity

- The specially prepared **anti-bovine protein monoclonal antibody** achieved the least cross reactivity against the feed ingredients. Namely, our kit shows no reactivity against **pork, chicken, and fish proteins as well as milk and gelatin** those are commonly supplemented in the feed.

Fast

- **140 minutes for ELISA assay**

【Specification】
- Sensitivity : 0.1% bovine MBM
- Sample preparation time : 30-60 minutes
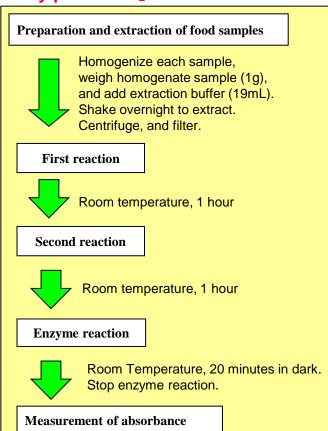- Time for ELISA assay : 140 minutes
- The intra-assay precision (C.V.) : ≦10%.
- The inter-assay precision (C.V.) : ≦ 10%.

Morinaga BioScience, Inc.
URL : https://www.morinaga-biosci.com

【Assay procedure】

Preparation and extraction of food samples

Homogenize each sample,
weigh homogenate sample (1g),
and add extraction buffer (19mL).
Shake overnight to extract.
Centrifuge, and filter.

First reaction

Room temperature, 1 hour

Second reaction

Room temperature, 1 hour

Enzyme reaction

Room Temperature, 20 minutes in dark.
Stop enzyme reaction.

Measurement of absorbance

【Other required reagents and instruments】

- Distilled water (or Deionized water)
- Micropipets/disposable tips ranging 0.01 - 1mL
- Volumetric cylinders
- Polypropylene centrifugation tube
- Polypropylene test tubes (1- 2 mL size)
- Homogenizer/blender
- Horizontal shaker
- Vortex mixer
- Microplate reader covering 450nm,
  and 600 to 650 nm

【Kit component 】

	Name of component	Content	Quantity
①	Solution A (10X concentrate)	100 mL	1 bottle
②	Solution B (10X concentrate)	100 mL	1 bottle
③	Solution C (10X concentrate)	100 mL	1 bottle
④	Solution D (10X concentrate)	13 mL	1 bottle
⑤	Positive control Ⅰ (Low concentration)	1.8 mL	1 vial
⑥	Positive control Ⅱ (High concentration)	1.8 mL	1 vial
⑦	Negative control Ⅰ	1.8 mL	1 vial
⑧	Negative control Ⅱ	1.8 mL	1 vial
⑨	Wash buffer (20X concentrate)	50 mL	1 bottle
⑩	Enzyme-conjugated antibody	12 mL	1 bottle
⑪	Enzyme substrate (TMB solution)	13 mL	1 bottle
⑫	Stop solution (1 N Sulfuric acid)	13 mL	1 bottle
⑬	Antibody-coated microplate module (One module consists of 8 wells)	3 modules / pack	4 packs
	Frame for mounting the microplate module		1 piece
	Microplate cover		1 piece