

WHY Piron-gamma?

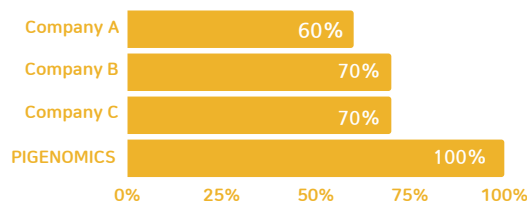
01 High Sensitivity and specificity Via Peptide Antigen

Maximization of specificity and sensitivity by using a **specific antigenic peptide** of M.bovis, the causative agent of bovine tuberculosis
[Patent Number: 102157770]

Diagnostic limits of PPD-B:

- Risk of false positive due to non-specific antigenic protein production during the producing process
- Sensitivity cannot be increased

<Test-positive rate of tuberculosis infected cows>



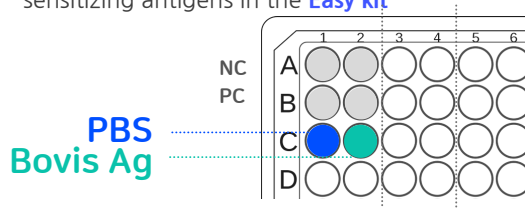
※Self-clinical test results

02 Introduction of Blood QC system through Mitogen

Improved reliability of diagnosis by confirming the validity of the sensitization process through mitogen that induces T cell mitosis

03 Up to 46 tests per plate

Efficient experimentation with a reduced protocol performed with only two sensitizing antigens in the **Easy kit**



*The above image is for illustration purposes only, and there is no color difference between the actual sensitization serum.



Piron-gamma TB ELISA kit

Cat No. PITB-E101Product
License number: No. 235-001
Packing Unit: 100Tests/1kit
300Tests/1kit

QUICK PROTOCOL

PRE-PROCESS

Blood 1ml
+ each antigen 50ul sensitization
(Antigen: M.bovis, PBS, Mitogen)

16~24hr 37°C Incubation
500g 10min Centrifuge

Plasma Collection Storage Period

- Up to 7 days refrigerated | Frozen up to 3 weeks

ELISA

Dilution Buffer 50ul + Plasma 50ul

30min 37°C Incubation
X 5 Washing

HRP Conjugate 100ul

30min 37°C Incubation
X 5 Washing

Substrate 100ul

30min Room Temperature

Stop Solution 100ul

Measure within 5 min

Microplate Reader

Measurement wavelength 450nm,
reference wavelength 620nm

some images have been designed using resources from Flaticom.com

Meet simple and convenient experiments through upgraded
Plron - gamma kit **Ver.2!**

“Medical devices for in vitro diagnostic analysis for animals
Bovine tuberculosis diagnostic kit using Direct Sandwich **ELISA** technique”



Plron-gamma Easy TB ELISA kit

Product Identification Number:
24257800

Packing Unit: 180Tests/1kit
300Tests/1kit
460Tests/1kit

➤ Extended Shelf Life

12 Months ➤ **15 Months**

➤ Shortened Testing Time

2hr 15min ➤ **1hr 30min**

➤ Integrated Indicator Color



PBS
Dilution Buffer



Mitogen



Bovis Ag
HRP Conjugate

➤ Increased Buffer Capacity **~150%**

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- Innovative products for field use
- All reagents ready to use
- practical shelf life of 15 months
- Room temperature distribution guarantee
- Reducing product shipping costs
- Competitive pricing

4.3 Comparison of diagnosis kit

Comparison of diagnosis kit for bovine tuberculosis disease using IGRA
(Interferon Gamma Release Assay)

	Piron Gamma TB ELISA Kit (Pigenomics)	BOVIGAM™ TB Kit (Thermofisher-pironic)	IDvet PPD antigens & the ID Screen® Ruminant IFN-g ELISA (Idvet)
Antigen	Bovis specific peptide	PPD	PPD
Measured specificity	99%	99%	99%
Measured sensitivity (LOD IFN-g)	0.5ng/ml	5ng/ml	5ng/ml
Clinical specificity	99%	94%	99%
Clinical sensitivity	94%	85%	88%
Blood validation component (Pokeweed mitogen)	Include	Optional (Purchased separately)	Optional (Purchased separately)
Convenience	All reagents are ready to use	Some reagents must be diluted before use	Some reagents must be diluted before use
Packing size	300Test	150Test/450Test	192Test/384Test/960Test