Instruction for Retinol Binding Protein (RBP) Detection Kit (Nephelometry)

1. Product Name

Generic name: Retinol Binding Protein (RBP) Detection Kit
Trade name: RBP
English name: Retinol Binding Protein (RBP) Detection Kit

2. Package

Specification 1: 25T/kit	REF: 32026057
Specification 2: 2X25T/kit	REF: 32080057
Specification 3: 50T/kit	REF: 32027057
Specification 4: 100T/kit	REF: 32028057
Specification 5: 150T/kit	REF: 32029057
Specification 6: 200T/kit	REF: 32030057
Specification 7: 250T/kit	REF: 32031057
Specification 8: 300T/kit	REF: 32032057

3. Intended Use

The kit is used for the in vitro quantitative determination of RBP in human serum.
Clinical is mainly used for the assessment of liver and gallbladder disease

4. Test Principle

Once the RBP in the sample meet with its corresponding antibody in the liquid phase, there will be formation of antigen - antibody complex, which have a certain degree of turbidity. The level of turbidity is proportional to the amount of antigen present in the sample. By detecting the reaction change at specific wavelengths and referring to the multi-point calibration curve, the RBP content can be calculated.

5. Main Compositions

5.1 Buffer solution: phosphate buffer 20mmol/L, sodium chloride 15.8g/L.
5.2 Antiserum: Anti-human RBP antibody latex particles.
5.3 Quality control product (optional): RBP-contained solution. Refer to the bottle stickers for specific target value.
5.4 Magcard: Load the calibration curve information of this batch
5.5 Stirrer: stainless steel

6.Accessories Required But Not Provided

6.1Pipettor
6.2Pipettor tips
6.3Reaction cup

7. Storage and Validity Period

The sealed detection kit can be stored at 2-8℃ for 12 months. Do not freeze. Once opened, the reagents stored at 2-8℃ are stable for 30 days. Refer to the label for specific production Date.

8. Applicable Instruments

Applicable for PA50&PA54 Specific Protein Analyzer and PA120& PA200 Fully-auto Specific Protein Analyzer manufactured by Genrui Biotech Inc.

9. Sample Requirements

Serum samples should be timely separated to avoid hemolysis. Samples are sensitive to heat, samples should be analyzed as soon as possible after collection, samples should be placed at 2-8 ℃ for no more than 1 day if not timely inspected.

10. Test Methods

Bring all reagents to room temperature (18-25℃) beforethe use.

10.1 Test methods for PA50&PA54 Specific Protein Analyzer

1) After start up, the instrument displays the main measurement interface, select the test item and sample type at the item column (After the confirmation, it will default to this item and sample type in the future.).
2) Click “LOT” at the batch No. column to enter the card-swiping interface. Put the corresponding magcard onto the magnetic induction area, when a “di” sound heard, the magcard was successfully swiped, and the interface returns to the main measurement interface. For the same batch of reagents, no need to swipe the card again.
3) The instrument interface prompts “Input Cup!”.
4) Take out one cuvette, put one stirrer into it, then use the pipettor to accurately add in 400μl buffer solution, then add in 5μl sample .
5) Put the cuvette into the test channel, the instrument automatically stir for one time.
6) The instrument prompts “Please Add Antiserum”, then use the pipettor to accurately add in 100μl antiserum.
7) Immediately press the corresponding channel’s start button, the instrument will stir automatically. When the test finished, the instrument will automatically display and print the test result.
8) After the test, take out the cuvette, the instrument prompts “Input Cup!”, do the next test.

10.2 Fully-auto specific protein analyzer (PA120, PA200) detection methods are as follows

1) Login fully-auto specific protein analyzer PA120, PA200 PC software, put the magcard onto the magnetic induction area, the instrument will prompt the card is successfully swiped, The same batch of reagents, only need swipe the card once.
2) Login the main measurement interface, apply for testing according to the items and sample types to be tested
3) Put the test sample in place, then put the corresponding reagents at the specified locations, Start the test, the instrument will automatically aspirate all the test samples and complete the measurement process. After the test is completed, you can view the measurement results and print the test results.
4) Please refer to PA120, PA200 manual for detailed description of instrument operation method.

11. Reference Value

Reference range: serum 25-70mg/L
It is recommended that the labs establish their own reference range.

12. Explanation for the Test Results

When used for diagnosis and treatment, Comprehensive judgment should be combined with the patient's history, symptoms and other results.

13. Calibration and QC

It is recommended to use normal and pathological values of biochemical

quality control serum for indoor quality control, the measured control value should be within the limit, if the control value out of control, the laboratory should take appropriate corrective measures.

14. Limitations for the Test Results

The diagnosis and treatment cannot only depend on this test result, please consider the clinical history and other laboratory test results at the same time. It is suggested that each laboratory builds up its own reference range based on its own patient group.

If the sample's test result is beyond the linearity range, please use distilled water to dilute the sample with integral multiples and re-test. The result should multiply the dilution times.

Bilirubin≤30 mg/dL; ascorbic acid≤20 mg/dL; these values have no effect on the determination

15. Product Performance Indicators

15.1 Analyze sensitivity: ≤10mg/L

15.2 Linearity range: 10-120mg/L, determination indicator: r ≥0.990

15.3 Measurement precision:

Repeatability: CV ≤6%, relative deviation of detection kit's inter batches (R) ≤ 10%

15.4 Accuracy: Bias% ≤ ±15%

16. Precautions

- Only used for in vitro diagnostic, please refer to the Operation Manual.
- Do not use the expired reagents. Shake the antiserum reagent well before use.
- Do not use reagents of different batches together.
- If accidentally splash the reagent on the human body surface such as skin, eyes, etc., rinse with water immediately, if eating go to hospital.

17. Labels

Label	Meaning
	Date of manufacture
	In vitro diagnostic medical device
	Manufacturer
	Biological risks
	Batch code
	Temperature limit
	Use-by date
	Authorized representative in the European Community
	Volume
	Consult instructions for use
	Do not re-use
	Keep away from sunlight
	Contains sufficient for <n>tests
	Catalogue number
	CE Marking

18. Reference

Wolf G. Serum retionl-binding protein:a link between obesity,insulin resistance,and type 2 diabetes.Nutr Rev(2007);65:251-256.

2. Clinical laboratory sample collection manual edit by Wang huixuan,Li xuemei,Wang ke. Yunnan Science and Technology Press.2008.

3. National clinical testing procedures_ the fourth edition.

19. Manufacturer

Genrui Biotech Inc.

Address: 6F, Shanshui Building B, NanshanYungu Innovation Industrial Park, 1183 Liuxian Blvd, Nanshan District, 518055, Shenzhen, P. R. China.

20. Medical Devices'Manufacturing Permit No.

Guangdong SFDA(State Food and Drug Administration) authorized Medical Device Manufacturing Permit No. 20041046

21. Instruction Approved and Revised Date

Approved date: June, 02nd, 2016

22.Guarantee and Technical Support

If invalid message repeats or need technical support, please contact Genrui Customer Service and Support Center

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