

## Albumin (ALB) Test Kit (BCG Mehtod)

### 【NAME】

Albumin (ALB) Test Kit (BCG Mehtod )

### 【INTEND USE】

This reagent is intended for the in vitro quantitative determination of Albumin (ALB) in human serum or plasma. Decreased serum albumin is often associated with reduced total protein. Common in malnutrition, chronic gastrointestinal diseases, diabetes, hyperthyroidism, fever, trauma. High serum albumin is common in dehydration or hemoconcentration.

### 【METHODOLOGY】

The measurement of serum albumin is based on its quantitative binding to the indicator 3, 3', 5, 5' - tetrabromo-m-cresol sulphophthalein (bromocresol green, BCG). The albumin-BCG complex absorbs maximally at 600 nm.

### 【STABILITY AND STORAGE】

Unopened, avoid light preservation in 2 ~ 8 °C, valid for 12 months;  
Opened, avoid contamination preservation in 2 ~ 8 °C, valid for 1 month.  
Reagent is not allowed frozen.

### 【SPECIMEN COLLECTION AND HANDLING】

It is best to fresh Serum, heparin anticoagulant blood plasma.  
Don't use the blood sample collection bottle containing sodium fluoride.  
Serum stability: 15 ~ 25 °C preservation stability in 3 days;  
2 ~ 8 °C preservation stability in 2 weeks;  
-20 °C preservation stability in 1 month.

### 【APPLICABLE INSTRUMENT】

Fully automatic biochemistry analyzer..

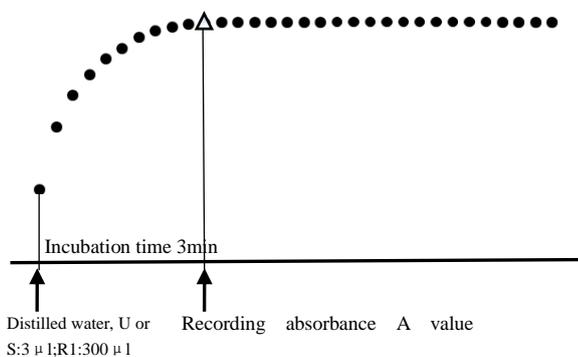
### 【SYSTEM PARAMETERS】

The following system parameters are recommended. Individual instrument applications are available upon request from the Technical Support Group

Temperature	37° C
Cuvette light path	1.0cm
Primary Wavelength	600 nm
Secondary Wavelength	750nm
Assay Type	One Point End
Direction	Increase
Sample: Reagent Ratio	1:100
eg : Sample Vol.	3 μL
Reagent Vol.	300 μL
Linearity	0 ~ 60g/L
Testing	Deducting the reagent blank

### 【OPERATION STEPS】

R:Reagent S:Calibrator U:Sample



### 【CALCULATION】

Use The Calibrator

$$\text{Sample ALB concentration} = \frac{\text{Sample } \Delta A}{\text{Calibrator } \Delta A} \times \text{Calibrator concentration}$$

### 【REFERENCE RANGE】

35 ~ 55g/L

By clinical trials, choose no less than 100 newborn or adults blood specimens, tested by automatic biochemical analyzer, and then processing the testing value with statistical method, calculating out the reference range.

**Recommendation: The laboratory set up its own reference range!**

### 【THE LIMITATION OF TEST RESULTS】

ALB testing is just one of the standard that clinician diagnose the patient. Clinical physicians should according to patients' bodies, history and other diagnostic program, to get comprehensive judgment.

### 【THE INTERPRETATION OF TEST RESULTS】

Human error, the processing of specimen, analysis instrument deviation, etc. all can affect the measurement result; When one sample deviates from the expected value too far, need to be tested again.

### 【PERFORMANCE INDEX】

1. Reagent blank absorbance  $\leq 0.35$ , (600nm, 1cm optical path).
2. Precision: repeatability  $CV \leq 5\%$ ; batch variations  $R \leq 5\%$ .
3. Accuracy: relative deviation  $\leq 10\%$ .
4. Linearity range: 0 ~ 60g/L,  $r \geq 0.990$ .
5. Stability :All package reagent, non corrosive gas and avoid light, preservation in 2~8 °C, stable 12 months.  
once opened, avoid light, preservation in 2~8 °C, stable 30 days.

### 【ATTENTION】

1. Reagent contains sodium azide (toxic) preservatives, avoid contact with skin and mucous membrane. If necessary preventive measures should be taken use of reagents, reagent contact with skin and mucous membrane, please rinse with water, please go to a doctor if necessary.
2. The maximum linearity is 60g/L. If testing results is upper limit, dilute with 0.9% sodium chloride solution before test, results multiplied by the dilution ratio.