ALBUMIN

Bromcresol Green Method

Cat.No. 101-0236 *Size 3 x 100 ml*
Cat.No. 101-0093 *Size 4 x 250 ml*

PRINCIPLE:

Serum albumin in the presence of bromcresol green at a slightly acid pH, produces a colour change of the indicator from yellow-green to green-blue.

SAMPLE:

Serum, heparinized or EDTA plasma

REAGENTS:

1. Albumin reagent

Bromcresol green	0.15 mmol/L
Succinate buffer, pH 4.2	75 mmol/L
Brij 35	7 ml/L

2. Standard
   Albumin Standard concentration see on the vial label

All reagents are stable up to the expiry date when stored at +2 °C to +8 °C.
Avoid direct sunlight.

PROCEDURES:

Wavelength:	630 nm (600-650 nm)
Cuvette:	1 cm light path
Temperature:	20 °C - 37 °C
Color stability:	60 min.
Zero:	reagent blank

Pipette into test tubes:	Reagent blank	Standard	Sample
Sample	-	-	10 µl
Standard	-	10 µl	-
H_2O	10 µl	-	-
Albumin reagent	2.0 ml	2.0 ml	2.0 ml
Mix and after 10 minute measure the absorbance of the sample and standard against the reagent blank.			

CALCULATION:

$$\frac{A_{\text{sample}}}{A_{\text{standard}}} \times \text{Standard conc.} = \text{g/L Albumin}$$

EXPECTED VALUES:

38 - 55 g/L

LINEARITY:

up to 60 g/L

QUALITY CONTROL:

CONTRO-N	20 x 5 ml	Cat. No. 101-0083
CONTRO-P	20 x 5 ml	Cat. No. 101-0084

NOTE:

1. Gross lipaemia and hemolysis will interfere. A sample blank must be determined by pipetting 10 µl sample to 2.0 ml physiological saline and measurement against distilled water. The absorbance of the sample blank has to be subtracted from absorbance of the sample.

2. The test is not influenced by bilirubin values up to 344 µmol/L. Each 1.0 g/L hemoglobin will represent an albumin increase of 1 g/L.

3. Lower temperatures can cause the reagent precipitation. Heating to the room temperature the precipitation is being dissolved and albumin reagent is ready for use.

REFERENCES:

1. Doumas, B.T., et al. Clin. Chim. Acta 1971; 31: 87.
2. Webster, D., Clin. Chim. Acta, 1974; 53:109.