LiquiMAX ALBUMIN - SLR

(BCG METHOD)

INTENDED USE:

In-vitro test for the quantitative determination of albumin in human serum and plasma.

PRODUCT FEATURES:

1. Single Liquid Reagent.
2. One step End Point assay.
3. Superior over Methyl Orange and HABA dye methods
4. Linearity : 10 gm/dl.
5. Aqueous albumin standard provided
6. Can be used on any colorimeter, spectrophotometer, discrete semi automated and automated analyzers

ORDERING INFORMATION

Ref./Cat. No.	Pack Size	Presentation
AVALB - 200	4 x 50 ml	Single Liquid Reagent
AVALB - 1000	2 x 500 ml	

CLINICAL SIGNIFICANCE :

Hypoalbuminemia is found in any liver impairment (e.g. hepatitis), nephrosis, certain chronic diseases (e.g. rheumatoid arthritis), malnutrition, severe hemorrhage and pregnancy. Lowering of serum albumin usually results in lowering of A/G (Albumin/Globulin) ratio. Elevated serum albumin levels apart from indicating dehydration are generally of little significance.

PRINCIPLE

Albumin binds with Bromocresol green Green (BCG) in a buffered medium to produce a green colored complex. The intensity of this color is proportional to the Albumin concentration.

STORAGE & STABILITY

All the reagents are to be stored at 2-8ºC and are stable till the expiry date mentioned on the label.

SPECIMEN

Serum / Heparinised or EDTA plasma.

PROCEDURE

Pipette into test tubes labelled Blank (B), Standard (S) and Test (T) as follows:

Reagent		B	S	T
1.	BCG Reagent	1.0 ml	1.0 ml	1.0 ml
2.	Albumin Standard (Conc. 4 gm/dl)	-	10 µl	-
	Specimen	-	-	10 µl

Mix well and read absorbance of Standard (S) and Test (T) against Blank (B) at 578 nm. (570-630).

CALCULATIONS

1. Albumin (Ab) in gm/dl $= \frac{\text{Abs. of T}}{\text{Abs. of S}} \times 4$

2. Globulin in gm/dl = TP-Ab

3. A/G Ratio $= \frac{\text{Albumin in gm/dl}}{\text{Globulin in gm/dl}}$

Note : To calculate Globulin and A/G Ratio user should estimate total protein concentration of the sample also using LiquiMAX Total Protein- SLR kit.

NORMAL RANGE

Albumin	:	3.5–5.4 gm/dl
Globulin	:	2.3–3.6 gm/dl
A/G Ratio	:	1.0–2.3 gm/dl

It is recommended that laboratories establish their own normal range.

SYSTEM PARAMETERS

Reaction type	:	END POINT
Reaction Slope	:	Increasing
Wave length	:	578 nm (570-630)
Flow cell Temp.	:	37°C
Sample volume	:	10 µl
Reagent volume	:	1000 µl
Standard concentration	:	4
Units	:	gm/dl
Blanking with	:	Reagent
Low normal	:	3.5
High normal	:	5.4
Linearity	:	10

QUALITY CONTROL

To ensure adequate quality control, the use of commercial reference control serum is recommended with each assay batch. Use of Quality Control material checks both, the instrument and the reagent functions.

NOTES

1. In Albumin assay, standard controls containing human Albumin are to be employed with this procedure, since the absorptivity of the BCG Albumin complex differs for Albumin of different species.
2. If a large volume of reagent is required for absorbance reading, requisite volumes can be taken in multiples keeping the same ratio of reagents to specimen / standard.
3. As with all the diagnostic procedures, the Physician should evaluate data obtained by the use of this kit in light of other clinical information.

REFERENCES

1. Doumas, B.T. (1971) Clin. Chem Acta 31, 87.
2. Doumas, B.T. (1978) Clin. Chem Acta 23, 663
3. Webster, O. (1977) Clin. Chem 21, 1159 N.

Manufactured in India by :
Avecon Healthcare Pvt. Ltd.
Plot No. : # 338, Sector-2, Industrial Growth Centre, Saha, Haryana (India) 133104.
E-mail : sales@aveconhealthcare.com, exportzone@aveconhealthcare.com
Website : www.aveconhealthcare.com
CIN NO : U24230HP2006PTC030275

LiquiMAX ALBUMIN - SLR
(BCG METHOD)

for advanced diagnostic solutions you can count on AVECON