

Automated Procedure

Cat. No. 30110	R1	1 x	20	ml
	R2	1 x	20	ml
Cat. No. 30111	R1	2 x	20	ml
	R2	2 x	20	ml

Anti-Streptolysin O ASO

Quantitative turbidimetric immunoassay

Liquid Reagents

Principle

Polymer particles are activated with Streptolysin O. This suspension of sensitized particles agglutinates in the presence of Anti-Streptolysin O, causing turbidity, that is proportional to the quantity of Anti-Streptolysin O in the sample.

Concentrations in the test

Reagent R1			
Phosphate buffer pH = 7.05	50	mmol/L	
Reagent R2			
Suspension of polymer particles coated with streptolysin O.			

Stability of reagents

Reagent R1: liquid, ready to use.

Reagent R2: liquid, ready to use.

The reagents are stable up to expiry date given on the label when stored at +2 → +8 °C. **Don't freeze.**

Reagent deterioration

The presence of precipitates in the reagents or values of control sera outside the manufacturer's acceptable range may be an indication of reagent's instability.

Specimen collection and handling

1. Fresh non-hemolyzed serum or heparin plasma is recommended.
2. Sodium fluoride and anticoagulants such as oxalate, EDTA, citrate and heparin do not influence the assay.
3. It is recommended to measure ASO without delay. If the test cannot be done immediately. The sample can be stored tightly sealed for 2 days at 2 - 8 °C and 3 months at - 20 °C.

Calibrator

ASLO-Cal Cat.No 15041

Quality control

Rheumatoid control Level 1 Cat. No. 15241

Rheumatoid control Level 2 Cat. No. 15242

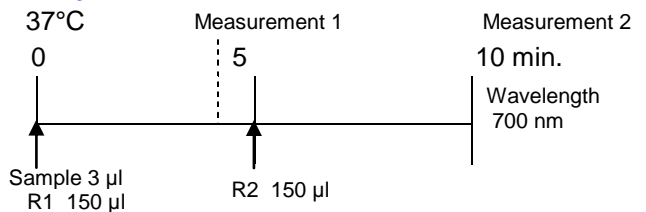
A quality control program is recommended for all clinical laboratories. The analysis of control sera in both the normal and abnormal ranges with each assay is recommended for monitoring the performance of the procedure. The values obtained for the controls should fall within the manufacturer's acceptable ranges. If values are to be established for unassayed control sera, the laboratory should assay each serum a sufficient number of times to generate a valid mean and acceptable range.

Procedure

The reagent is designed to be used on commercially available random access analyzers.

As a standard procedure, please refer to that detailed below.

Assay



Note: Applications on various instruments are available upon request.

Linearity

Determination range is from 12.5 U/mL to 900 U/mL.

If the result exceeds 900 U/mL, repeat the test using diluted sample (1+3) with sodium chloride solution (0.9 %) and multiply the result by 4. An antigen excess effect is not expected for ASO concentrations below 1500 IU/ml.

Interferences

1. Bilirubin (up to 25 mg/dl) and hemoglobin (up to 1.0 g/dl) do not demonstrate significant interference.
2. Lipid interference was not observed in samples spiked to 0.25 % intralipid. Highly lipemic samples or samples displaying turbidity after thawing should be diluted with saline and reassayed.
3. As is well known, rheumatoid factors (RF) may cause falsely elevated values in Anti-streptolysin O assays. Therefore, elevated Anti-streptolysin O values in RF positive samples must be carefully interpreted. The addition of an equal volume of a 10 mmol/L dithiothreitol solution can be used as a remedy to completely abolish the RF activity of a high RF sample.

Precautions

1. Reagent bottle should be shaken before use by gently inverting several times.
2. Do not use reagents past the expiration date stated on each reagent container label
3. The reagent is designed to be used on commercial available automated analyzers. Refer to the operating manual for a description of instrument operation and specifications.
4. After opening the reagent, it is not recommended to store it on the instrument for a long period of time. When the opened reagent is stored, cap the bottle and keep it at the specified temperature.
5. Reagents contain sodium azide. Don't swallow. Avoid any contact with skin and mucous membranes. Sodium azide can form explosive compounds with copper or lead plumbing. Flush drains carefully with large quantity of water when disposing them.

Reference range

Values < 250 IU/mL are within the normal range. Children may show higher values. Each laboratory should establish its own mean and range to account for geographical, ethnical, and other differences.

References

1. Larrea LB et al. – Clin. Immunoassay. 1992, 15, 182 - 186.
2. Todd EW. J Pathol bacteriol. 1932 , 47 , 423 - 444.