

R1: 1x 50 mL **REF** A-R1100004401  
R2: 1x 8,5 mL



**SUMMARY AND EXPLANATION OF THE TEST**

The group A β-haemolytic streptococci produces various toxins that can act as antigens, one of these exotoxins is streptolysin O.  
The affected organism produces specific antibodies against streptolysin O.  
The concentration of ASL (O) in the patient's serum will enable to establish the degree of infection due to β-haemolytic streptococci.

**PRINCIPLE OF THE TEST**

Measurement of antigen-antibody reaction by the end-point method.

**Anti-Streptolysin (O) Reagent Kit**

Code A-R1100004401  
Reagent 1 (R1) - Buffer - 1 x 48.5 mL/vial  
Reagent 2 (R2) - 1 x 8.0 mL/vial

Each vial is ready to use and contains:

Reagent 1:	Conc.	U.M.
Phosphate buffered saline (pH 7.43)	/	/
Polyethylene glycol	40	g/L
Sodium azide	0.95	g/L
Reagent 2:	Conc.	U.M.
Glycine Buffer (pH8.2)	/	/
ASL sensitized Latex	0.17	%
Sodium azide	0.95	g/L

**Reagent Preparation:**

Liquids reagents ready for use.

**Storage and Stability:**

If stored at 2 - 8°C avoiding direct light, the reactants remain stable until the expiration date printed on the label.  
Stability in the instrument is at least 4 weeks if contamination is avoided. Do not freeze.  
Do not freeze the reagents.

**EQUIPMENT / ACCESSORIES REQUIRED AND NOT SUPPLIED**

General laboratory equipment  
Saline (9 g/L)  
Calibrators and/or Control  
(Pooled human serum, liquid and stabilized. Contains 0.95 g/L sodium azide. Value is stated in the insert)

**PRECAUTIONS AND LIMITATIONS**

For *in vitro* diagnostic use.

Only experienced laboratory personnel should use this test and handling should be in agreement with Good Laboratory Practice (GLP).  
Reagents from different lots must not be interchanged.

**Safety Precautions**

- Each donor unit used in the preparation of the reagents, standards and controls was found to be negative for the presence of HIV1 and HIV2 antibodies, as well as for the hepatitis B surface antigen and anti-hepatitis C antibodies, using a method approved by the FDA
- Do not pipet by mouth.
- Do not smoke, eat or apply cosmetics in areas in which patients' samples or kit reagents are handled.
- Cuts, abrasions, and other skin lesions should be properly protected with an appropriate waterproof dressing.
- Take care to avoid self-inoculation, splashing of mucous membranes or generation of aerosols.
- Laboratory gloves should be worn while handling patients' samples or disposing of solid or liquid wastes.
- In addition to the eventual risk indications regarding the active components, the reagents contain inactive components such as preservatives (e.g. sodium azide or others) and detergents. The total concentrations of these components is lower than the limits reported by the current directive and following modification and amendments. However, it is recommended to handle reagents carefully, to avoid ingestion and contact with eyes, skin and mucus membranes and to use laboratory reagents according to good laboratory practice.
- All human samples must be handled and disposed of as potentially infectious materials.
- For information about safe handling, read carefully the Material Safety Data Sheet (MSDS).

**Disposal of Reagents**

Disposal of reagents must be performed in accordance with the EC regulations regarding waste, or the local national or regional legislation.

**SPECIMEN COLLECTION AND STORAGE**

Use fresh serum.  
If the test can not be carried out on the same day, the serum may be stored at 2 - 8°C for 48 hours.  
If stored for a longer period, the sample should be frozen.

**Quality control**

It's necessary, each time the kit is used, to perform the quality controls and to check that values obtained are within the acceptance range provided in the insert. Each laboratory should establish its

own mean and standard deviation and adopt a quality control program to monitor laboratory testing.

**Automation**

All applications not explicitly approved by ISE S.r.l. cannot be guaranteed in terms of performance, and must therefore be established by the operator.

**Procedures**

Sample/Control/Standard: Ready for use.  
Reference curve: generate a reference curve by diluting the standard high level  
Ref R1300001101 1:1, 1:2, 1:4, 1:8, 1:16 in saline 9 g/L. Use saline 9 g/L as zero point.

**Method for automated instrumentation**

<b>Analyzer:</b>	Miura Family		
<b>Analyte Name :</b>	Anti-Streptolysin (O)	Ref.:	A-R1100004401
<b>Method Code:</b>	ASL		
<b>Type:</b>	Different. Sample Blk.		
<b>Unit:</b>	IU/mL		
<b>Filter F1:</b>	578 nm		
<b>Blank in calculation:</b>	Not Used		
<b>Step</b>	<b>Reaction volume</b>	<b>U.M.</b>	
<b>Sample volume:</b>	3	µL	
<b>Volume Reagent 1:</b>	250	µL	
<b>Volume Reagent 2:</b>	40	µL	
<b>Incubation Time</b>	60	Sec.	
<b>Reading Time:</b>	300	Sec.	
<b>Calibration</b>	User Defined		

**EXPECTED VALUES**

0 - 200 IU/mL (WHO)  
Reference values are considered indicative since each laboratory should establish reference ranges for its own patient population. The analytical results should be evaluated with other information coming from patient's clinical history.

**PERFORMANCE CHARACTERISTICS**

The performance characteristics for the Anti-Streptolysin (O) reagents were measured on a clinical chemistry analyzer.

Measuring Range: 0 - 400 IU/mL  
Detection Limit: 12.5 IU/mL  
Hook effect: No Risk  
Sensitivity: 0.00077 ABS units/concentration unit

<b>Precision:</b> [%CV]	Low	Medium	High
Intra-Run	2.9		3.60
Inter-Run		6.32	

<b>Accuracy:</b> [IU/mL]	Control	Assigned	Measured
Bio-Rad 1		62 (49 - 74)	65
Bio-Rad 2		173 (138 - 208)	171

Specificity: Monospecific  
Interferences: No interference whit hemolysed, icteric nor lipemic sera  
Limitations: None  
Comparison with Turbidimetry:  $y = 0.9981x - 8.1154 / r = 0.9972$   
Stability at 4°C: at least 3 years after production

**BIBLIOGRAPHY**

- Dillon, H. C. jr., Reeves M. A., Am. J. Med., 56, 333-346 (1974)
- Klein, G. C., Baker, C. N., Jones, W. L., 21, 999-1001 (1971)



Numero lotto / Lot number



Consultare la metodica operativa / consult instructions for use



Per uso diagnostico in-vitro / For in-vitro diagnostic use



Prodotto da / manufactured by



Data di scadenza / expiry date



Temp. Di Conservazione / storage temperature

