

**Quantitative determination of anti-streptolysin O (ASO) in serum
Only for *In Vitro* Diagnostic use**

ORDER INFORMATION

REF	CONT
TASO 25	1 X 25 ML
TASO 50	1 X 50 ML

CLINICAL SIGNIFICANCE

SLO is a toxic immunogenic coenzyme produced by b-hemolytic streptococci of group A,C and G. Measuring the ASO antibodies are useful for the diagnosis of rheumatoid fever, acute glomerulonephritis and streptococcal infections. Rheumatoid fever is an inflammatory disease affecting connective tissues from several parts of human body as skin, heart, joints etc... and acute glomerulonephritis is a renal infection that affects mainly to renal nephritis.

PRINCIPLE

The ASO turbilatex is a quantitative turbidimetric test for the measurement of ASO in human serum or plasma. Latex particles coated with streptolysin O-(SLO) are agglutinated when mixed with sample containing ASO. The agglutination causes an absorbance change, dependent upon the ASO content of the patient sample that can be quantified by comparison by comparison from calibrator of known ASO concentration.

REAGENT COMPOSITION

Reagent I : Tris buffer 20 mmol/l, pH 8.2 Sodium Azide 0.95 g/L
 Reagent II : Latex particles coated with Streptolysin O, pH 10.0
 ASO-CAL : Human serum- ASO concentration is stated on vial.

SAFETY PRECAUTIONS AND WARNINGS

1. For *in vitro* diagnostic use only.
2. DO NOT pipette by mouth. Avoid contact with skin and eyes. If spilt, thoroughly, wash affected areas with water. For further information, consult the Albumin Reagent Material Safety Data Sheet.
3. Reagent contains Sodium Azide as a preservative. This may react with copper or lead plumbing to form explosive metal azides. Upon disposal, flush with large amounts of water to prevent azide build up.
4. Do not use the reagent after the expiration date printed on the kit.
5. Components from human origin have been tested and found to be negative for the presence of HBsAg, HCV and antibody to HIV(1/2). However handle the calibrator cautiously as potentially infectious material.

SAMPLE COLLECTION AND PRESERVATION

Fresh serum : Stable for 7 days at 2 - 8°C or 3 months at -20 °C.
 Samples with presence of fibrin should be centrifuged before testing.
 Do not use highly hemolysed or lipemic sample.

REAGENT PREPARATION AND STORAGE

Working reagent : Swirl the latex vial gently before use. Prepare the necessary amount as follows.
 8 ml Diluent + 2 ml Latex reagent.

ASO calibrator: Ready to use value mention on vial in IU/ml.

All the component of the kit are stable until the expiry date on the label when stored tightly closed at 2-8°C and contaminants prevented during there use, Do not use expired reagents.

REAGENT STABILITY

Working reagent: stable for 30 days at 2 - 8°C.

ASO Calibrator: stable till expiry at 2 - 8°C. Do not freeze.

AUTOMATED PARAMETERS	
Wavelength	540 (530-550) nm
Cuvette	1 cm light path
Reaction Temperature	37 °C
Measurement	Against Distilled water
Reaction	2 point kinetics
Reaction Direction	Increasing
Sample Volume	10 µl
Reagent Volume	1000 µl
Linearity	800 IU/ml.

MANUAL ASSAY PROCEDURE

PIPETTE INTO TEST TUBES

	CAL	SAMPLE
Sample	-	10 µl
Standard	10 µl	-
Reagent	1000 µl	1000 µl

Mix well, and read the absorbance immediately A1 and after 2 minutes A2 of the sample addition.

CALCULATION

$$\text{ASO (IU/ml)} = \frac{(A2-A1) \text{ Sample}}{(A2-A1) \text{ Calibrator}} \times \text{calibrator concentration}$$

LINEARITY

The method is linear to a concentration of 800 IU/ml. If the concentration exceeds this value, the sample should be diluted 1:3 with 0.9% saline solution and reassayed.

QUALITY CONTROL

To ensure adequate quality control Normal and abnormal control with assayed values should be run as unknown samples.

REFERENCE VALUES

Serum, plasma ADULTS	upto 200 IU/ml.
CHILDRENS	upto 100 IU/ml.

BIBLIOGRAPHY

1. Alouf Jodeph E. Pharma Ther 1980;11:661-717.
2. M Fasani et al eur J Lab Med 1994;Vol 2 no 1-67.
3. Todd E W J Exp Med 1932;55-267-280.