

# ASO-Q

Turbidimetry

REF. 7709 1x100 ml with calibrator  
REF. 7731 1x 50 ml with calibrator  
REF. 7781 1x 50 ml without calibrator  
REF. 7780 1x100 ml without calibrator



## INTENDED USE

Quantitative determination of anti-streptolysin O (ASO) in serum.

## PRINCIPLE

Latex particles coated with streptolysin O (SLO) are agglutinated when mixed with samples containing ASO. The agglutination causes an absorbance change, dependent upon the ASO contents of the patient sample that can be quantified by comparison from a calibrator of known ASO concentration.

## SAMPLE

Fresh serum. Stable 7 days at 2-8°C or 3 months at -20°C.

The samples with presence of fibrin should be centrifuged before testing.

Do not use highly hemolyzed or lipemic samples.

## KIT COMPONENTS

Reagent (A) ASO-Q Diluent Volume = 45/90 ml	Tris Buffer 20 mmol/l, pH 8.2 Preservative
Reagent (B) ASO-Q Latex Volume = 5/10 ml	Latex particles coated with Streptolysin O, pH 10.0 Preservative
Calibrator Volume = 1 ml	Serum of human origin <b>Concentration on label</b>

The reagents are stable until the expiration date indicated on the label if stored tightly closed at 2-8°C. Once opened, the reagents are stable one month at 2-8°C, in the absence of contamination.

Keep bottles closed when not in use.

## REAGENTS PREPARATION

Liquid Reagents, bring to room temperature before use.

## PRECAUTIONS AND WARNINGS



### Biological Risk for Calibrator.

Reagent may contain some non-reactive and preservative components. It is suggested to handle carefully it, avoiding contact with skin and swallow.

Use the normal precautions required in the laboratory.

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 cautiously as potentially infectious.

Dispose of waste according to local laws.

## PROCEDURE

Wavelength:	540 nm (530-550)
Lightpath:	1 cm
Temperature:	37°C

### Use as monoreagent: (with one point or multipoint Calibration)

For the calibration to a single point, dilute with saline 1:3 the calibrator.

For the multi-point calibration, prepare the following dilutions of the calibrator: 1, 1/2, 1/4, 1/8, 1/16.

Mix gently latex 4-5 times before use.

Prepare the necessary amount as follows:

#### 1 ml Reagent B (Latex) + 9 ml Reagent A (Diluent)

The working solution (A+B) is stable 30 days at 2-8°C.

Adjust the instrument to zero with distilled water:

pipette:	sample	calibrator
Working solution (A+B)	1000 µl	1000 µl
sample	10 µl	
calibrator		10 µl

Mix, read the absorbance of the sample and the calibrator immediately (A1) and after 2 minutes (A2).

### Use as Bireagent: (with one point or multipoint Calibration)

Dilute with saline 1:3 the calibrator (for calibration to one point) or prepare following dilutions of the calibrator: 1, 1/2, 1/4, 1/8, 1/16 (for multi-point calibration)

Mix gently latex 4-5 times before use.

Pipette:	Blank	Sample	Cal (5 points)
Reagent (A)	900 µl	900 µl	900 µl
Water	10 µl		
Sample		10 µl	
Calibrators			10 µl
Reagent (B)	100 µl	100 µl	100 µl

Mix, read immediately the absorbance of the sample and calibrator/s (A1). Wait 3 minutes and make the second reading (A2).

Reaction volumes can be proportionally varied.

This method describes the manual procedure to use the kit.

For automated procedure, ask for specific applications.

## RESULTS CALCULATION

Obtain manually absorbance values to report on diagram.

$$ASO (U/ml) = (A2-A1)_{Sample} / (A2-A1)_{Calibrator} \times \text{Calibrator Value}$$

## EXPECTED VALUES

ASO: < 200 U/ml

Each laboratory should establish appropriate reference intervals related to its population.

## QUALITY CONTROL

You must perform the controls at each kit's use and verify that the values obtained are within the reference range reported in the operating instructions. For this purpose we recommend the use of control serum:

REF. 7771, REF. 7770 and the Calibrator: REF. 7772.

## PERFORMANCE

**Sensitivity:** the sensitivity of the method is: 20 U/ml. Values less than 20 U/ml give non-reproducible results.

**Prozone effect:** No prozone effect up to 3000 U/ml.

**Linearity:** the method is linear up to 800 U/ml. For higher values, dilute the sample 1:3 and multiply the result by 3.

### Precision intra-assay:

	Level 1	Level 2	Level 3
Mean (U/ml)	135	236	372
DS	3.4	5.4	5.9
CV %	2.5	2.3	1.6

### Precision inter-assay:

	Level 1	Level 2	Level 3
Mean (U/ml)	135	236	372
DS	7.9	13.2	17.7
CV %	5.9	5.5	4.8

**Interferences:** bilirubin does not interfere up to 20 mg/dl. Lipemia and hemoglobin do not interfere up to 10 g/l. Rheumatoid factor up to 600 U/ml does not interfere.

**Correlation against a reference method:**  $Y = 1.305x - 7.65$   $r = 0.98$

## REFERENCES

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