Turbilife™ Anti-Streptolysin O
(Immunoturbidimetry)

CLINICAL SIGNIFICANCE
Immunological testing for specific antibodies to streptococcal metabolic products yields important information about previous streptococcus infections. Antibodies are produced against the pathogen and its metabolic products. One example is the antibody to streptolysin O, an enzyme produced by Lancefield group A ß- haemolytic streptococci. Determination of antistreptolysin O is performed when toxic and sensitizing associated illnesses occur, such as rheumatic fever (major symptoms: carditis, polyarthritis, chorea minor, subcutaneous nodules, erythaema annulare) and poststreptococcal acute glomerulonephritis.

Various methods are available for assaying antistreptolysin O, such as latex agglutination and haemolysis inhibition.

This ASO assay is based on the principle of immunological agglutination test principle using latex particles as reaction enhancer.

TEST PRINCIPLE
Anti-Streptolysin O coated on latex reacts with antibodies in the sample to form an Antibody - Antigen complex, following agglutination and is measured immunoturbidimetrically.

NORMAL RANGE
Adult : upto 200 IU / ml
Children : upto 150 IU / ml

It is recommended that laboratories should establish their own normal range.

KIT CONTENTS	Code No. KAST1 25T	Code No. KAST2 50T
Reagent 1. Buffer solution	20ml	40ml
Reagent 2. Latex reagent	5ml	10ml
Reagent 3. Calibrator	1 vial	1 vial

SPECIMEN
Serum

WORKING REAGENT PREPARATION
All the reagents are ready to use
Add 1 part well mixed latex reagent R2 to 4 parts of buffer R1. The working reagent is stable for 20 days at 2-8^{0}C. Mix well before use.

PROCEDURE
Pipette into test tubes as follows:

	Sample / calibrator
Sample / Calibrator	10 µl
Working Reagent	1000 µl
Mix well. Read absorbance A_1 after 10 seconds, incubate for 2 minutes and read absorbance A_2 at 540nm.	

CALCULATIONS
$\Delta A = [(A_2 - A_1)]$ sample or calibrator

$$\frac{\Delta A \text{ Sample}}{\Delta A \text{ Calibrator.}} \times \text{Calibrator concentration} = \text{ASO Conc. (IU/ml)}$$

QUALITY CONTROL
It is recommended to include Immunology Quality Control Serum (Level 1 & II) with each assay batch to verify the performance of the procedure. Failure to obtain the proper range of values in the assay of control sera may indicate reagent deterioration, instrument malfunction or procedural errors.

SYSTEM PARAMETERS
Mode	:	Fixed Time Kinetic
Wave length	:	540nm
Delay time	:	10 seconds
Measuring time	:	120 seconds
Flow Cell Temp	:	37^{0}C
Reagent volume	:	1000 µl
Sample volume	:	10µl
Low normal	:	0
High normal	:	200
Calb. Conc.	:	Refer calibrator vial
Units	:	IU / ml
Blank	:	Distilled water

NOTES
Haemolyzed or Lipeamic samples are not suitable for testing.
Centrifuge samples containing precipitate before performing.

LINEARITY
Linearity of the kit is 3 - 800 IU/ml.

BIBLIOGRAPHY
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