# ßiomaghreb

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Serological detection of antistreptolysin O antibodies on latex particles

#### IN VITRO DIAGNOSTIC USE



44013 50 Tests REF 44020 100 Tests REF

# **CLINICAL SIGNIFICANCE**

Streptolysin O is a toxic immunogenic exoenzyme produced by - heamolitic Streptococci of groups A, C and G. Measuring the ASO antibodies are useful for the diagnostic of rheumatoid fever, acute glomerulonephritis and streptococcal infections. Rheumatic fever is an inflammatory disease affecting connective tissue from several parts of human body as (skin heart joints etc. ) and acute glomerulonephritis is a renal infection that affects mainly to renal glommerulus.

#### PRINCIPLE

Detection of antistreptolysin O (ASO) antibodies by agglutination reaction on card of latex particles sensitized with stabilized streptolysin 0. The reagent is standardized to the WHO.

#### REAGENT COMPOSITION

Latex ASO	Homogenize carefully before use
(Ready to use)	(1 drop = 50 µl)
Positive control	Dropper bottle
(Ready to use)	(1 drop = 50 μl)
<b>Negative control</b>	Dropper bottle
(Ready to use)	(1 drop = 50 μl)
Card	Card for carrying out the test
Stirrers	stirrers for mixing reagents and samples

### SAFETY CAUTIONS

Biomaghreb reagents are intended for use by qualified personnel for in vitro use (do not pipette by mouth)

• Refer to the current MSDS available on request or on www.biomaghreb.com.

- Check the integrity of the reagents before use.
- · Disposal of waste: comply with applicable legislation.

For safety reasons, treat any specimen or reagent of biological origin as potentially infectious. Observe the applicable legislation.

#### SAMPLE PREPARATION

Sera fresh or stored at -20°C, showing complete coagulation. Reject any lipemic or contaminated serum. Do not use plasma.

# PRESERVATION AND STABILITY

Store at 2-8°C until the expiration date indicated on the box.

# PROCEDURE

Bring reagents and test sera to room temperature (18-25°C). 1) Qualitative test

Place successively on the card :

- · drop of the positive control 1 drop of negative control
- 1 drop of the serum to be tested

Next to each deposit; add, using the vertical dropper, 1 drop of well homogenized ASO Latex Reagent. Mix with a stirrer.

Make a slow rotational movement to the card. Note the appearance of agglutination in exactly 3 minutes.

#### ♦ RESULT

> Positive reaction (agglutination) :

Presence of antistreptolysin O antibodies at a level higher than 200 UI/mI (pathological threshold). > Negative reaction (homogeneous suspension) :

Absence of antistreptolysin O antibodies or presence at a level lower than 200 UI/mI.

#### 2) Semi quantitative test

Prepare a series of dilutions of the test serum in 9 g/l NaCl solution. Repeat the test for each dilution in the same way as for the qualitative test and look for the last dilution still giving agglutination. The concentration of the test serum in ASO is estimated by multiplying the titer obtained by the sensitivity threshold of the test 200 UI/mI.

X reagent sensitivity (200 IU/ml)

NORMAL VALUE Up to 200 IU/ml

# **INTERPRETATION**

Streptococcol A infections disease can be complicated by acute Rheumatoid arthitis, acute glomenula nephritis

Essential biological diagnostic is immunologic-as no bacteria were found in late streptococci infection.

The anti-streptolynine O antibodies is rate more than 200 IU/ml in 80% of streptococci infections. A repeated test is recommended 15 days later as 200 IU/ml represents the pathological limit detection

# BIBLIOGRAPHIE

-Alouf, J.E. and Raymond, M. Biochimie, 56 (1973). Bach, G. -Wiatr, R.A., Anderson, T.O. and Chealte, E.: Amer, J.Clin. Path., 52 (1969)

-Halbert, S.P.: Ann. N.Y. Acad. Sci. 103 (1963) Klein. G.C,

-Baker C.N. and Jones. W.L. Appl. Microblol., 21, 999 (1979).

-Klein, G.C, Manual of Clin. Immunology, Ame, Soc. Microbiol, p. 264 (1976)

-Schimidt, K., Mueller-Eckardt, Ch. and Beckmann, A: Rheumatol, 29 (1970).











Keep away from light

