Instructions for use

STREPTOCOCCUS GROUP ANTISERA

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STREPTOCOCCUS GROUP ANTISERA FOR LANCEFIELD

For *in vitro* diagnostic use

Intended use
The streptococcal antisera are intended for serotyping of streptococci by means of the Lancefield test[1,2].

Description
Streptococcal antisera from SSI Diagnostica are raised in rabbits.
Streptococcal group antisera from SSI Diagnostica are supplied in vials with 1 mL.
Streptococcal group antisera are for serotyping from an extract using the Lancefield test and can be used for identification of either group A, B, C, D, F, G or L.
Cross-reactions have been removed by absorption.

Principle
Streptococcal group antisera are intended for serotyping using the Lancefield test.
Lancefield test: when an acid antigen extract is mixed with a specific antiserum directed against bacterial surface components, the cells are bound together through antigen-antibody bonds to form aggregates (precipitation). This is visible to the naked eye as snow in the capillary tube.

Materials required but not provided
- 5-10% blood agar plate
- Glucose broth
- 1 µL Inoculation loop
- Centrifuge
- Pipette
- 0.06N, 0.1N and 0.2N HCl
- Phenol red (indicator)
- 0.2N NaOH
- Glass tube
- Capillary tubes
- Incubator (35-37 °C)
- Water bath (100 °C)

Storage and stability
Store at 2-8 °C in a dark place. Expiry date is printed on the package.

Procedure
The product will react with a Lancefield test. The result is often more evident when compared with a negative control.

1. The streptococci are grown overnight at 35-37 °C on a 5-10% blood agar plate.
2. Add a few colonies into 6 mL glucose broth and incubate at 35-37 °C overnight.
3. Centrifuge the suspension for 10 minutes at 3,000 rpm and remove the supernatant.
4. Add 0.1 mL of either 0.06N, 0.1N or 0.2N HCl to the bacteria pellet.
5. The acid suspension is placed in a water bath (100 °C) for 15 minutes.
6. Cool the acid suspension under tab water.
7. The pH-value is adjusted to approximately 7 by addition of droplets of 0.2N NaOH until the color is brown/orange (use phenol red as pH-indicator, red (pH > 8.2) - yellow (pH < 6.4)).
8. Centrifuge the suspension for 10 minutes at 3.000 rpm and transfer the supernatant (acid antigen extract) to a new glass.
9. Equal amount of the antiserum (first) and the acid antigen extract (second) are sucked up with the capillary tube. The antiserum must be in the upper part of the capillary tube to diffuse down through the acid extract.
10. Read the result against a light source.
11. Precipitation looking like snowfall will occur if positive.

Quality certificate
SSI Diagnostica's development, production and sales of *in vitro* diagnostics are quality assured and certified in accordance with ISO 13485. Certificate of analysis can be downloaded from our website: ssidiagnostica.com.

References

1. Lancefield, R.C. A Serological Differentiation of Specific Types of Bovine hemolytic streptococci (group B), J. Exp. Med., 59:441-58, 1934.
2. Slotved, H.C. et al., False-negative results in typing of group B streptococci by the standard I Lancefield antigen extraction method, J. Clin. Microbiol., May;40(5):1882-3, 2002.

Information and ordering

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