

MAST® ASSURE ANTISERUM STREPTOCOCCUS PNEUMONIAE TYPING

Intended Use

Liquid stable antisera for the determination of capsular typing of *Streptococcus pneumoniae*.

FOR IN VITRO DIAGNOSTIC USE ONLY

Contents

See pack label.

Formulation

MAST® ASSURE ANTISERUM are prepared from rabbits hyperimmunised with standard strains of killed organisms possessing known serotypes or group specific antigens and contain 0.085% sodium azide as preservative.

Stability and storage

Store unopened at 2 to 8°C until the expiry date shown on the pack label. Once opened, MAST® ASSURE ANTISERUM should be stored at 2 to 8°C and may be used until the expiry date given on the label. **Do not freeze reagents.**

Warnings and precautions

For *in vitro* diagnostic use only. Observe approved biohazard precautions and aseptic techniques. To be used only by adequately trained and qualified laboratory personnel. Sterilise all biohazard waste before disposal. Sodium azide preservative may be toxic if ingested and may react with lead and copper plumbing to form highly explosive salts. Always dispose of by flushing to drain with plenty of water. Refer to Product Safety Data sheet.

Materials required but not provided

Standard microbiological supplies and equipment such as loops, applicator sticks, clean glass microscope slides or glass test tubes swabs, MAST® culture media, incinerators and incubators, etc., as well as reagents and additives such as sterile 0.85% saline solution.

Procedure

Slide agglutination of live organisms

1. Dispense two 5-10 µl volumes of sterile 0.85% saline solution (saline) onto a carefully cleaned microscope slide. The slide may be partitioned using a chinagraph pencil. With a platinum wire or disposable inoculation loop take one 1 to 2mm colony of live organisms from a fresh culture on MAST® Columbia Agar DM115 with added 5 to 7% horse blood or similar and emulsify into each drop of saline to produce a distinct and uniform turbidity.
2. Place a drop (30 to 40 µl) of antiserum onto one of the emulsified isolates and on to the other a drop (30-40 µl) of saline as a control.

Note: Do not allow the organism to contaminate the antiserum dropper bottle.

3. Mix the reagents by tilting the slide back and forth for 60 seconds while viewing it under indirect light against a dark background.
4. Distinct clumping or agglutination within this period, without clumping in the saline control (auto-agglutination), should be regarded as a positive result. Weak agglutination should be recorded as negative.

Interpretation of results

Isolates producing a distinct positive reaction with a polyvalent antiserum are assumed to be a *Streptococcus pneumoniae* bearing one or more of the capsular types represented by the antiserum. Further testing of the isolate should be conducted as described in steps 1 to 3, with monovalent antisera.

The following table should be used for the interpretation of results for testing types 29, 35 and 47 respectively.

		Antiserum specificity		
		29	35	47
Type antigen	29	+	-	-
	35	(+)	+	-
	47	-	+	+

Limitations of use

Only cultures of organisms identified as *Streptococcus pneumoniae* by morphological and biochemical features should be serotyped with this product. Polyvalent and monovalent antisera are intended for use in rapid slide agglutination tests only.

Quality control

It is recommended that quality control should be performed with at least one organism to demonstrate a positive reaction and at least one organism to demonstrate a negative reaction. Do not use the product if the reactions with the control organisms are incorrect. Check for signs of deterioration. Do not use reagents if they are contaminated or cloudy.

References

Bibliography available on request.