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MAST ASSURE™ VIBRIO CHOLERAE ANTISERA

Liquid stable antisera for the determination of O antigens for the serological identification of *Vibrio cholerae.*

FOR IN VITRO DIAGNOSTIC USE ONLY

Contents: See pack label.

Formulation
MAST ASSURE™ ANTISERA 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™ ANTISERA 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 to 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 Nutrient Agar DM179 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.

Interpretation of results
Isolates producing a distinct positive reaction with the polyvalent antisera are assumed to be *V. cholerae* O1. Further testing of the isolate should be conducted as described in steps 1 to 3, with monovalent antisera. Specimens that show agglutination only with Inaba-type serum should be reported as *V. cholerae* O1 serovar Inaba and specimens that show agglutination only with Ogawa-type serum should be reported as *V. cholerae* O1 serovar Ogawa. Specimens that show agglutination with both types of serum should be reported as *V. cholerae* O1 serovar Hikojima.
Specimens that show agglutination only with O139 Bengal serum should be reported as *V. cholerae* O139 Bengal.

Note:- it should be remembered that El Tor Vibrios cannot be distinguished from *V. cholerae* O1 by serological means.

Limitations of use
Only cultures of organisms identified as *V. cholerae* by morphological and biochemical features should be serotyped with this product.
Polyvalent antisera are intended for use in rapid slide agglutination tests only. Monovalent antisera are intended for use in rapid slide agglutination tests for further identification.
Positive results may be confirmed by tube agglutination tests.

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.

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