

Sputagest MAST® SELECTAVIAL

SV40 Series

Intended Use

This is a liquefying agent for sputum to permit easier isolation of organisms responsible for chronic lung disease.

FOR IN VITRO DIAGNOSTIC USE ONLY

Contents

10 vials of MAST® SELECTAVIAL.

Formulation

Material:	Concentration in sputum digestant:
Dithiothreitol (DTT)	1.0 g/L
Sodium chloride	7.8 g/L
Potassium chloride	0.2 g/L
Disodium hydrogen phosphate	1.12 g/L
Potassium dihydrogen phosphate	0.2 g/L

Storage and shelf life

Store unopened at 2 to 8°C until expiry date shown on pack label. Once reconstituted use immediately.

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. Refer to Product Safety Data sheet.

Materials required but not provided

Standard microbiological supplies and equipment such as loops, MAST® culture media, swabs, applicator sticks, incinerators and incubators, etc., as well as serological and biochemical reagents and additives such as blood.

Procedure

1. Reconstitute the contents of one vial using the diluent specified on the pack label. The best method is to aseptically add the diluent using a sterile needle and syringe. Draw the diluent into the syringe and after removing the plastic cap, inject through the rubber stopper of the vial.
2. Mix gently to dissolve completely.
3. Aseptically add the vial contents to 95 mL of sterile deionised water. The reconstituted product is now ready to use.

A General Use

1. Sputum samples may be washed initially with saline.
2. To the sputum sample add an equal volume of reconstituted SPUTAGEST, shake to mix and incubate in a 37°C water bath. Periodically shake until liquefaction is complete. Inoculate onto a suitable culture medium to grow any organisms present. Prolonged standing will not inhibit floral multiplication.

B For isolation of predominant organisms:

1. Liquefy the sample as described in section A above.
2. Centrifuge the mixture for 5 minutes at 1500 rpm to sediment bacterial cells.
3. Discard the supernatant and resuspend the sediment in a small amount of SPUTAGEST. The volume of diluent used will depend on the volume of sediment and the final concentration desired. A dilution of 1:100 with an inoculum of 0.01 mL is recommended for colony counting. Serial dilutions are recommended for an accurate count.

C For Acid Fast Bacilli:

1. Liquefy and centrifuge the sputum sample as described in sections A and B above.
2. Decontaminate the specimen by a standard method, e.g.: resuspend the sediment in 5 to 10 mL of 1% NaOH solution. Mix the specimen thoroughly and incubate.
3. Centrifuge the specimen for 15 minutes at 3000 rpm and discard the supernatant.
4. Wash the sediment twice by resuspension and centrifugation with 10 mL each of diluted SPUTAGEST.
5. Finally resuspend the sediment in 0.5 mL of diluted SPUTAGEST.
6. Culture for Acid Fast Bacteria on appropriate media e.g. Mast Egg Media.

Mast manufactures prepared Egg Media for the isolation of Mycobacteria:

Löwenstein Jensen Medium	EM100
Löwenstein Jensen Medium with pyruvate	EM102

Quality control

User quality control: Check for signs of deterioration.

References

Bibliography available on request.