

MASTRING® MAST® ID XV MIRROR RING

MID/XV

Intended use

For the differentiation of *Haemophilus* spp.

FOR IN VITRO DIAGNOSTIC USE ONLY

Contents

50 MAST® ID XV MIRROR RINGS

Formulation*

Filter paper 6 tipped ring, printed with the appropriate letter or letters and impregnated with carefully controlled concentrations of X, V and XV factors. The tips are arranged in a mirror format to permit two organisms to be tested per plate.

Storage and shelf life

Store at 2 to 8°C in the containers provided until the expiry date shown on the pack label. Allow to equilibrate to room temperature before opening.

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

- Using a pure, fresh culture of the test organism, prepare a suspension equivalent in density to a McFarland 0.5 opacity standard.
- Using a sterile swab spread the suspension uniformly across the surface of an agar plate prepared from a medium containing neither X or V growth factors. The plate can alternatively be divided into two with one organism swabbed onto each half of the plate.
- Using a sterile needle or forceps, place a MAST® ID XV MIRROR RING on to the surface of the inoculated medium. If two organisms are being used, ensure that each type of tip is in contact with each organism.
- Incubate at 35 to 37°C for 18 to 24 hours.
- Measure and record the diameter of any zones of growth that are observed.

Interpretation of results

A clearly defined zone of growth, which may need viewing under magnification, around one or more discs identifies the species of *Haemophilus* as shown in the table. *H. influenzae* produces discrete zones, about 20mm in size but *H. parainfluenzae* gives more diffuse zones generally of a larger size.

Species	Growth around disc containing:		
	X Factor	V Factor	XV Factor
<i>H. influenzae</i>	-	-	+
<i>H. aegyptius</i>	-	-	+
<i>H. parainfluenzae</i>	-	+	+
<i>H. haemolyticus</i>	-	-	+
<i>H. parahaemolyticus</i>	-	+	+
<i>H. ducreyi</i>	+	-	+

An alternative method for the interpretation of growth factor requirements is the porphyrin test which confirms the haemin independence of certain *Haemophilus* spp. It is recommended that this test be performed in conjunction with an X&V satellite test using MAST® ID ALA Discs (D49).

Quality control

Check for signs of deterioration. Quality control must be performed with at least one organism to demonstrate a positive reaction. Do not use the product if the reactions with the control organisms are incorrect. The list below illustrates a range of performance control strains which the end user can easily obtain.

Test Organisms	Result
<i>Haemophilus influenzae</i> ATCC® 49766	Growth and correct X & V response
<i>Haemophilus parainfluenzae</i> ATCC® 7901	Growth and correct X & V response

Limitations

It is recommended that biochemical and/or serological tests are performed on colonies from pure culture to confirm identification.

References

Bibliography available on request.