

MASTDISCS® ID ONPG Discs

D56/D56C

Intended use

For the detection of β -galactosidase activity.

FOR IN VITRO DIAGNOSTIC USE ONLY

Contents

100 discs in a vial (D56) or a pack of 5 cartridges (D56C), each cartridge containing 50 discs.

Formulation*

6mm diameter filter paper discs impregnated with carefully controlled concentrations of O-nitrophenyl- β -D-galactopyranoside (ONPG).

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

1. Using a pure, fresh culture of the test organism, prepare a suspension in sterile 0.85% saline solution, equivalent in density to a McFarland 3 opacity standard.
2. Using a sterile needle or forceps, place a ONPG disc into a suitable, small container and add 0.5ml of the bacterial suspension.
3. Incubate at 35 to 37°C, preferably in a water bath, and observe hourly, (up to 4 hours) for the development of a yellow colouration.
4. Leave any colourless tubes to incubate for 24 hours.
5. Observe after 24 hours for the development of a yellow colouration.

Interpretation of results

Positive - Any shade of yellow within 4 hours.
Any shade of yellow at 24 hours (colourless up to 4 hours) indicates a late lactose fermenter.

Negative - Colourless after 24 hours.

Quality control

Check for signs of deterioration. Quality control must 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. The list below illustrates a range of performance control strains which the end user can easily obtain.

Test Organisms	Result
<i>Citrobacter freundii</i> ATCC® 8090	Positive
<i>Escherichia coli</i> ATCC® 25922	Positive
<i>Salmonella arizonae</i> ATCC® 13314	Positive
<i>Salmonella enteritidis</i> ATCC® 13076	Negative
<i>Proteus mirabilis</i> ATCC® 29906	Negative

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.