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MAST® *ID*
PYR Strips

ETO7

Intended use
A rapid strip test for the detection of pyrrolidonyl amino peptidase activity in streptococci and enterococci.

FOR IN VITRO DIAGNOSTIC USE ONLY

Contents
25 strips (ETO7)

Formulation*
Filter paper strips 5.7cm by 0.6cm, which are printed to identify the test, positive control and negative control areas. The strips are impregnated with L-pyrrolidonyl-β-naphthylamide.

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 4-(Dimethylamino) cinnamaldehyde (DMACA), CAS No. 6203-18-5.

Procedure
1. Using a sterile needle or forceps, place a PYR Strip onto a suitable surface e.g. a clean microscope slide or empty Petri dish.
2. Aseptically add a small drop of sterile de-ionised or distilled water to each area of the strip. The paper should be moist but not saturated.
3. Using a pure, fresh culture of the test organism, remove several colonies by using either a wooden applicator stick or a loop and rub onto the test area of the strip.
4. Incubate at 35 to 37°C for 5 minutes.
5. Apply approximately 10µl DMACA reagent (as prepared below) to each organism applied.
6. Dissolve 1g of 4-(Dimethylamino) cinnamaldehyde (DMACA), CAS No. 6203-18-5, in 100ml of 10% v/v concentrated hydrochloric acid. The solution can be stored in the dark for up to 2 months at room temperature. DMACA reagent is classified as Irritant
7. Observe any colour change occurring within 30 seconds.

Interpretation of results
Positive - Fuschia pink colour development.
Negative - No colour change

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, these should be applied to the appropriate areas of the strip. 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
Streptococcus pyogenes ATCC® 19615	Positive
Enterococcus faecalis ATCC® 29212	Positive
Streptococcus agalactiae ATCC® 13813	Negative

Limitations
It is recommended that biochemical and/or serological tests are performed on colonies from pure culture to confirm identification e.g.
MAST® STREP - Enzyme Extraction (RST201).

Organisms other than streptococci or enterococci e.g. certain *Klebsiella* spp. may appear PYR positive. Only catalase negative, Gram positive cocci should be tested.

A small proportion of group A streptococci are unable to hydrolyse PYR.

Certain non enterococcal group D streptococci have been reported to be PYR positive.

References
Bibliography available on request.

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*Formulation may change to meet performance criteria