ENGLISH

H_2O_2 Reagent

Reagent for the catalase test

DESCRIPTION

H_2O_2 Reagent is a reagent for microbiological use made of a H_2O_2 solution, for the performance of the catalase test.

CONTENT OF THE PACKAGES

Each package contains:

- 1 vial containing 5 mL of 7.5% H_2O_2 solution.
- 1 instructions sheet.

ITEMS NECESSARY BUT NOT INCLUDED IN THE PACKAGES

- CATALASI/OXY TEST (ref. 88023)
- PHYSIOLOGICAL SOLUTION (ref. 20095)
- Various material for laboratory of microbiology

PRINCIPLE OF THE METHOD

The catalase is an enzyme that resolves H_2O_2 in O_2 and H_2O. With the exception of Streptococci, most of aerobe and facultative anaerobe microorganisms have catalase activity. The production of catalase enzyme in the microorganism in examination is evidenced by the immediate bubbles formation after the addition of **H_2O_2 Reagent** to a suspension of the microorganism. The absence of bubbles formation indicates a microorganism unable to resolve H_2O_2, therefore lacking in catalase enzyme.

COMPOSITION

H_2O_2 Reagent (Content / vial):	
H_2O_2	0.375 mL
Distilled water	4.625 mL

TEST PROCEDURE

1. Reconstitute one tube of CATALASI/OXY TEST (ref. 88023) with 0.2 mL di PHYSIOLOGICAL SOLUTION (ref. 20095) .
2. Dilute one colony well isolated from culture medium without blood by a sterile loop into the tube of CATALASI/OXY TEST (ref. 88023). Shake gently.
3. Add 4-5 drops of **H_2O_2 Reagent**.
4. Observe the almost immediate development of gas bubbles and the foam formation in the tube.

INTERPRETATION OF THE RESULTS

Interpret results according to the table n°1:
Table n°1

	Catalase test
Bubbles and foam formation	Positive
No bubbles and foam formation	Negative

QUALITY CONTROL FOR THE USER

Appearance control: limpid and colourless solution.
Microbiological control: every batch of **H_2O_2 Reagent** is subjected to quality control, using a bacterial culture of *Pseudomonas aeruginosa* ATCC 27853 as positive control and one of *Enteroccus faecalis* ATCC 29212 as negative control.

PRECAUTIONS

The product **H_2O_2 Reagent** is classifiable as hazardous under current legislation; it is recommended that the Safety Data Sheet be consulted on its use. **H_2O_2 Reagent** must be used only for *in vitro* diagnostic use. It is intended for use in a professional environment and must be used in the laboratory by properly trained personnel, using approved asepsis and safety methods for handling pathogenic agents.

STORAGE

Store **H_2O_2 Reagent** at 2-8°C in its original package. In such conditions the product **H_2O_2 Reagent** is valid until the expiry date shown on the label. Do not use them beyond that date. Dispose of them if they show signs of deterioration.

DISPOSAL OF USED MATERIAL

After use, used **H_2O_2 Reagent** and the material that has come into contact with the sample must be decontaminated and disposed of in accordance with the laboratory procedures for the decontamination and disposal of potentially infected material.

REFERENCES

1. Murray, Baron, Pfaller, Tenorev and Yolken*: Manual of Clinical Microbiology (1995).*
2. Bayley and Scott's*: Diagnostic Microbiology (1986).*
3. Edwin H.Lenette*: Manual of Clinical Microbiology (1995).*

PRESENTATION

Product	REF	Σ
H_2O_2 Reagent	80057	1 vial x 5 mL

TABLE OF SYMBOLS

IVD *In Vitro* Diagnostic Medical Device	Do not reuse	Manufacturer	Contains sufficient for <n> tests	Temperature limitation
REF Catalogue number	Fragile, handle with care	Use by	Caution, consult accompanying documents	LOT Batch code

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