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Section: Technical Manual	Subject Title: ONPG-Phenylalanine-Motility Medium (ONPG-PAM)	
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ONPG-PHENYLALANINE-MOTILITY MEDIUM (ONPG-PAM)

Principle

This test is used to determine an organism's motility, its ability to ferment lactose and produce phenylalanine deaminase. The medium is primarily used as a screening procedure for the detection of enteric pathogens.

Reagents

ONPG-PAM tube
10% Ferric chloride

Other materials

Culture wire

Procedure

1. Inoculate the ONPG-PAM tube by stabbing the centre of it to the bottom of the tube.
2. Incubate the tube in O₂ at 35°C X 18 hours.
3. Read the tube for ONPG, motility and indole.
4. Add 2 drops of 10% ferric chloride solution and read the phenylalanine result.

Interpretation

ONPG:	positive:	yellow
	negative:	no colour change
Motility:	positive:	diffuse growth from line of inoculum
	negative:	growth does not spread from line of inoculum
Phenylalanine (PPA):	positive:	green
	negative:	yellow/brown

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Quality Control

Test with control organisms each time a new batch of media is prepared.

	ONPG	Motility	PPA
<i>K. pneumoniae</i> (ATCC 13883)	+	-	-
<i>P. vulgaris</i> (ATCC 13315)	-	+	+

References

1. Murray, PA, et al. 1999. Manual of Clinical Microbiology, 7th ed., American Society for Microbiology, Washington, D.C.