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# OxyPRAS Plus<sup>®</sup> Bile Bacteroides Esculin (BBE) Agar Plate Product Insert

OxyPRAS Plus<sup>®</sup> BBE Agar Plates are used for the isolation and cultivation of anaerobic bacteria within the *Bacteroides genus* from a variety of clinical and non-clinical materials.

## **Precautions:**

OxyPRAS Plus<sup>®</sup> BBE Agar plates are for In-Vitro Use only. OxyPRAS Plus<sup>®</sup> BBE Agar plates are packaged aseptically and must be handled aseptically to maintain sterility during use. A **Safety Data Sheet** is available on our website.

## **Product Characteristics:**

Bile Bacteroides Esculin agar with hemin is an enriched medium, useful for the selection and presumptive identification of the *Bacteroides fragilis* group (1,2,3). Differentiation of *Bacteroides sp.* is based on the hydrolysis of esculin (black coloration) and presence of catalase. Hemin provides nutrients for some strains of the pigmenting *Bacteroides* group and enhance the growth of some *Bacteroides sp.* (4,5). Gentamicin and Oxbile selectively inhibits growth of most gram-negative, facultative anaerobes.

The Oxyrase<sup>®</sup> Enzyme System used in OxyPRAS Plus<sup>®</sup> plates provides a reduced medium <u>before</u> sterilization and maintains the medium in a reduce state for storage and during use. The Oxyrase<sup>®</sup> Enzyme System prevents the formation of undesirable oxidation products in these PRAS plates. Growth of anaerobes on OxyPRAS Plus<sup>®</sup> plates require anaerobic incubation in jars, bags, or chambers.

Media Formulation (per liter)	<u>Initial pH: 7.5 (+/- 0.3)</u>
Beef Extract	11.0 <b>g</b>
Enzymatic Digest of Gelatin	34.5 <b>g</b>
Oxbile	2.0 <b>g</b>
Esculin	1.0 <b>g</b>
Ferric Ammonium Citrate	0.5 <b>g</b>
Agar	15.0 <b>g</b>
Hemin	10.0 <b>mg</b>
Vitamin K <sub>1</sub>	1.0 <b>mg</b>
Gentamicin	2.0 <b>mL</b>
Oxyrase <sup>®</sup> Enzyme System	- proprietary -
Deionized water	(made up to final volume)

This formula is typical. Production lots may be adjusted, to offset variances in raw materials in order to meet performance criteria.

#### Limitations:

Plates may only allow for growth of select organisms. Additional testing may be required to identify various colony types grown.

The Oxyrase<sup>®</sup> Enzyme System contains a penicillin binding protein that may interfere with penicillin and some related antibiotics.

B. vulagtus and B. ovatus may not hydrolyze esculin.

## Handling and Storage Instructions:

BBE Agar plates will arrive at room temperature. The following storage options are listed below:

1. <u>Long Term Storage</u>: Store the product at 2°C to 8°C. The expiration date of plates stored at this temperature is 6 months from the date of manufacture.

2. <u>Short Term Storage</u>: Store the product at  $20^{\circ}$ C to  $25^{\circ}$ C. The expiration date of plates stored at this temperature is 4 months from the date of manufacture.

Refer to plate / label for actual expiration date.

# Instructions for Use:

Before use, confirm expiration date and allow OxyPRAS Plus<sup>®</sup> BBE plates to warm to room temperature. Remove plates from protective pouch and examine for contamination. Streak plates.

After inoculation is complete, invert plates and incubate in an anaerobic bag, jar, or chamber to maintain an anaerobic environment. Use an appropriate indicator (such as OxyBlue<sup>TM</sup>) inside the plate, bag, jar, or chamber to test / confirm anaerobiosis.

## **Quality Control:**

Oxyrase, Inc. certifies that samples of each lot were quality control tested and performed acceptably according to Oxyrase, Inc.'s specifications, which include Clinical and Laboratory Standards Institute (M22-A3: Quality Assurance for Commercially Prepared Microbiological Culture Media). The following tests were confirmed:

Organism:	ATCC #	Results: (within 24 hours incubation)
B. fragilis	25285	Growth; black / brown coloration
P. melaninogenica	13124	Inhibition (bile inhibition)
E. coli	25922	Inhibition (gentamycin inhibition)

#### Guarantee:

We guarantee 30 days of shelf-life at  $20^{\circ}$ C to  $25^{\circ}$ C and 90 days of shelf-life at  $2^{\circ}$ C to  $8^{\circ}$ C from shipment date. If a longer shelf-life is needed, this should be arranged at the time your order is placed.

If OxyPRAS Plus<sup>®</sup> BBE plates fail to arrive with at least a 4 week shelf life, are contaminated and or oxidized, or fail when used as specified under recommended storage and use conditions, Oxyrase, Inc. will refund your purchase price. To receive a product refund, write or call Oxyrase Inc. with the product lot number printed directly on the plate in question (a return of defective product may be required for further investigation and evaluation). Oxyrase, Inc. is available to answer any questions about this product and its applications.

ATCC is a trademark of the American Type Culture Collection <sup>®</sup>May 2020 Oxyrase, Inc. LAB.0067.v.009

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Gibbons, R.J., and MacDonald, J.B. 1960. Hemin and Vitamin K Compounds as Required Factors for the Cultivation of Certain Strains of *Bacteroides melaninogenicus*. J. Bacteriol. 80:164-170.

<sup>1.</sup> J.F. MacFaddin. 1986. Media for Isolation, Cultivation,. Identification, Maintenance of Medical Bacteria. J. Basic Microbiology. 26(4): 240.

<sup>2.</sup> Phillips, E., and P. Nash. 1985. Culture Media. Manual of Clinical Microbiology. 4: 1051-1092.

<sup>3.</sup> Sutter, V.L., Citron, D.M., Edelstein, M.A.C., and Finegold, S.M. 1985, 4<sup>th</sup> ed. Wadsworth Anaerobic Bacteriology Manual. Star Publishing Co., Belmont, CA. pgs.: 85-89.