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## OxyPRAS Plus® Bile Bacteroides Esculin (BBE) Agar Plate Product Insert

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

### Product Performance:

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® Enzyme System used in OxyPRAS Plus® plates provides a reduced medium before sterilization and maintains the medium in a reduce state for storage and during use.

The Oxyrase® Enzyme System prevents the formation of undesirable oxidation products in these PRAS plates. Growth of anaerobes on OxyPRAS Plus® plates require anaerobic incubation in jars, bags, or chambers. Post-reduction of plates is *not* needed.

<u>Media Formulation</u> (per liter)	<u>Initial pH: 7.5 (+/- 0.3)</u>
Beef Extract	11.0 g
Enzymatic Digest of Gelatin	34.5 g
Oxbile	2.0 g
Esculin	1.0 g
Ferric Ammonium Citrate	0.5 g
Agar	15.0 g
Hemin	10.0 mg
Vitamin K <sub>1</sub>	1.0 mg
Gentamicin	2.0 mL
Oxyrase® 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® Enzyme System contains a penicillin binding protein that may interfere with penicillin and some related antibiotics.

*B. vulgatus* and *B. ovatus* may not hydrolyze esculin.

### Handling and Storage Instructions:

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

1. Short / Long Term Storage: Store the product at 20°C to 25°C (room temperature - RT) or at 2°C to 8°C (cold temperature - CT). The expiration date of plates stored at RT is 4 months, and 6 months for CT, from the date of manufacture.

Refer to plate / label for actual expiration date (MM / DD / YY).

### Instructions for Use:

Before use, confirm expiration date and allow OxyPRAS Plus® 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™) inside the plate, bag, jar, or chamber to test / confirm anaerobiosis.

### User 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:

<u>Organism:</u>	<u>ATCC #</u>	<u>Results:</u> (within 24 hours incubation)
<i>B. fragilis</i>	25285	growth; black / brown coloration
<i>P. melaninogenica</i>	13124	No growth
<i>E. coli</i>	25922	No growth

### Guarantee:

We guarantee 30 days of shelf-life for RT and 90 days of shelf-life for CT from shipment date. If a longer shelf-life is needed, this should be arranged at the time your order is placed.

If OxyPRAS Plus® 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.

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1. J.F. MacFaddin. 1986. Media for Isolation, Cultivation, Identification, Maintenance of Medical Bacteria. J. Basic Microbiology. 26(4): 240.
2. Phillips, E., and P. Nash. 1985. Culture Media. Manual of Clinical Microbiology. 4: 1051-1092.
3. 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.
4. Allen, S.D., Siders, T.A., and Marler, J.M. 1985. Isolation and Examination of Anaerobic Bacteria. Manual of Clinical Microbiology. 4: 413-433.
5. 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.