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Kanamycin, Vancomycin, Laked Blood (KVL) OxyPlate™ Product Insert

KVL OxyPlate™ contains Kanamycin and Vancomycin for the selective isolation and cultivation of anaerobic bacteria from a variety of clinical and non-clinical sources. Each KVL OxyPlate™ creates and maintains an anaerobic environment without the need for special equipment, such as chambers or jars. OxyPlatesTM simplify working with anaerobes.

OxyPlates™ are made PRAS (Pre-Reduced Anaerobically Sterilized) with our Oxyrase® Enzyme System and unique OxyDish™ plate design. The OxyDish™ is specially designed to create a seal that maintains anaerobiosis. A silicone OxyPad is provided and is used to facilitate opening and closing the OxyPlate. OxyDish™ has a track on the outside of the base and keys inside the lid that ride on that track. The open (vented) position is considered the highest point of the lid as it sits on the rails. The closed position (sealed) is considered the lowest point the lid as it sits on the rails.

Precautions:
KVL OxyPlates™ plates are for In-Vitro Use only. OxyPlates™ are packaged aseptically and must be handled aseptically to maintain sterility during use. A Safety Data Sheet is available on our website.

Product Characteristics:
The KVL OxyPlate™ contains Tryptic Soy Agar (TSA) medium with blood, vitamin K1, and hemin. It is an enriched, general purpose medium useful for the isolation of anaerobes (1,2,3). Vitamin K1 and hemin provide nutrients for some strains of the pigmenting Bacteriodes group and enhances the growth of some Bacteroides sp. and some gram-positive, non-spore forming anaerobes (4,7). Vancomycin and Kanamycin aid in the selective isolation of gram negative anaerobes, especially Bacteroides (8). Kanamycin inhibits protein synthesis in susceptible microorganisms and Vancomycin inhibits gram-positive bacteria by interfering with cell wall synthesis (5). Laked blood improves pigmentation of the Bacteroides.
- Bacteroides a saccharolyticus group (6). The Oxyrase® Enzyme System used in the OxyPlate™ 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. The unique OxyDish™ design maintains anaerobiosis within the sealed plate (9), which allows OxyPlatesTM to be opened and closed several times, and to regenerate and maintain anaerobic conditions.

Media Formulation (grams / liter)
Initial pH: 7.3 (+/- 0.2)

Pancreatic Digest of Casein	15.0 g
Peptic Digest of Soybean Meal	5.0 g
Yeast Extract	5.0 g
Sodium Chloride	5.0 g
L-Cysteine	0.6 g
Agar	15.0 g
Hemin	5.0 mg
Vitamin K1	1.0 mg
Vancomycin	1.1 mL
Kanamycin	2.3 mL
Laked Sheep Blood	35.0 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 microorganisms. Additional testing may be required to microorganisms grown on KVL OxyPlates™.

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

Handling and Storage Instructions:
KVL OxyPlates™ will arrive at room temperature.
Store the product at 2°C to 8°C. The expiration date is **3 months** from the date of manufacture.

Instructions for Use: (refer to OxyPlate™ product insert for information)
Before use, warm KVL OxyPlates™ to room temperature. Remove the plate from the protective pouch and handle the OxyPlate™ from the sides to prevent damage of the anaerobic seal. Examine plates for contamination, evidence of oxidation / discoloration (i.e. plate is brown, instead of clear red), and the expiration date.

When streaking or inoculating the surface of an OxyPlate™, microorganisms deposited in the ring impression may grow and spread under the ring when the dish is sealed. Thus, control of streaking technique is at the discretion of the end-user.

After inoculation is complete, invert plates and incubate in an aerobic environment. Do not stack traditional petri-dishes on top of OxyPlates™, as anaerobic seal damage may occur. Use an appropriate indicator (such as OxyBlue™) inside the plate 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
B. fragilis	25285	Growth in 2-3 days
C. perfringens	13124	No growth in 2-3 days
P. anaerobius	27337	No growth in 2-3 days
F. nucleatum	25586	No growth in 2-3 days
E. coli	25922	Inhibition

Guarantee:
We guarantee 30 days from shipment date. If a longer shelf-life is needed, this should be arranged at the time your order is placed.
If KVL OxyPlates™ fail to arrive with at least a 4 week shelf life, are contaminated and or oxidized, or fail when used as specified, Oxyrase, Inc. will refund your purchase price. To receive a product refund, write or call Oxyrase Inc. with the product lot number found 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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