Isovitox Enrichement

- For in vitro use only -

Catalogue No.

VI85-10 Isovitox Enrichment [10-mL / 1-Litre] (Frozen Liquid)
LI85-10 Isovitox Enrichment [10-mL / 1-Litre] (Lyophilized)

VI87-10 Isovitox Enrichment with Extra Dextrose [10-mL / 1-Litre] (Frozen Liquid)
LI87-10 Isovitox Enrichment with Extra Dextrose [10-mL / 1-Litre] (Lyophilized)

Our Isovitox Enrichment is a nutritional supplement used in the preparation of chocolate agar. The completed medium is used for the cultivation of fastidious organisms such as *Neisseria* and *Haemophilus* species.

Isovitox Enrichment is based on the work of numerous researchers that found that different chemicals, such as glutamine and cocarboxylase, could enhance the growth of gonococci. These findings allowed the creation of a chemically defined supplement that could replace yeast dialysate that was initially incorporated into chocolate agar. Isovitox Enrichment also contains V-factor (ß-Nicotinamide Adenine Dinucleotide) which is an essential growth factor for some *Haemophilus* species.

More selective media may be prepared by adding various antimicrobial solutions that will inhibit the growth of unwanted organisms.

Active Ingredients per 10 mL Vial
(Each vial prepares 1 liter of media)

Dextrose ..... 1.1 to 2.5 g
L-Cysteine ..... 259 mg
L-Glutamine ..... 100 mg
L-Cystine ..... 11.0 mg
Adenine ..... 10.0 mg
Cocarboxylase .....…...1.0 mg
Guanine .....… 0.3 mg
Ferric nitrate ..... 0.2 mg
p-Aminobenzoic acid ..... 0.13 mg
Vitamin B_{12} ..... 0.1 mg
Thiamine HCl ..... 0.03 mg
NAD ..... 2.5 mg

Appropriate Commercial Bases

Manufacturer	Description	Catalogue No.
Acumedia	GC Agar	7104A
BBL	GC Agar Base	211275
Difco	GC Medium Base	228950
Merck	Thayer-Martin Agar Base	1.10728
Oxoid	GC Agar Base	CM367

Reconstitution Procedure

The lyophilized supplement must be reconstituted prior to using:

1. Aseptically add 10.0-mL of the sterile diluent provided.
2. Swirl vial gently until supplement is completely dissolved.

Recommended Method of Media Preparation

1. Allow one 10-mL vial of Isovitox Enrichment ample time to defrost and reach room temperature prior to its addition, or reconstitute a lyophilized version of the supplement as indicated above. Also, warm 500-mL of 2% Hemoglobin Solution (Dalynn VH55) to 45-50°C in a warm water bath.
2. Prepare GC Agar Base using 500-mL distilled water for each final litre volume of media. Mix and sterilize according to the manufacturer's instructions.
3. Cool the sterilized base to approximately 45-50°C. Aseptically add 500-mL of warm 2% Hemoglobin Solution and the contents of one well-mixed 10-mL Isovitox Enrichment vial. Incorporate thoroughly by swirling.
4. Aseptically, dispense the completed medium into sterile petri dishes or tubes.
5. For petri dishes, allow medium to set on a cool, level surface.

Quality Control

The following organisms are used to determine the performance of the completed medium. Inoculate and incubate at 35°C in a CO_2-enriched environment for up to 48 hours.

Organism	Expected Results
Neisseria gonorrhoeae ATCC 43069	Growth
Haemophilus epidermidis ATCC 10211	Growth

- *Isovitox Enrichment should be used within four hours of thawing and can be refrozen if unopened. We do not recommend using only a portion of the supplement and refreezing the remainder due to contamination concerns*

- *Do not flash defrost Isovitox Enrichment as heat is detrimental to some components of this supplement*

Storage and Shelf Life

Our frozen Isovitox Enrichment has a shelf life of 26 weeks from the date of manufacture when stored at -20ºC. The lyophilized supplement has a shelf life of 104 weeks (2 years) from the date of manufacture when stored at 4 to 8°C.

References

1. Johnston J. Comparison of gonococcus cultures read at 24 and 48 hours. J Vener Dis Inform 1945; 26:239.
2. Lankford CE. Chemically defined nutrient supplements for gonococcus culture media. Bacteriol Proc 1950; G20:40.
3. Lankford CE, Scott V, Cox MF, Cooke WR. Some aspects of nutritional variation of the gonococcus. J Bacteriol 1943; 45:321.
4. Lankford CE, Snell EE. Glutamine as a growth factor for certain strains of *Neisseria gonorrhoeae*. J Bacteriol 1943; 45:410.
5. Kellogg DS Jr., Cohen IR, Norins LC, Schroeter AL, Reising G. *Neisseria gonorrhoeae*. II. Colonial variation and pathogenicity during 35 months in vitro. J Bacteriol 1963; 96:596.
6. MacFaddin JF. Media for isolation-cultivation-identification-maintenance of medical bacteria, vol I. Baltimore, MD: Williams and Wilkins, 1985.

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