

Product Information

Vitamin Mix Ready-Made Solution

Microbial Growth Medium Supplement

MBD0063

Product Description

Vitamin mixtures are used regularly in promoting growth of bacteria and fungi from different types of microbiomes, such as from gut, rumen, soil, and water.^{1,3-8} The use of vitamin mixtures helps scientists reduce time spent on creating the optimal conditions for microbial growth of a specific bacteria as well as diversified culturing of microbial samples.

Different types of bacteria (aerobic, anaerobic, extremophiles, etc.) require different combinations of a variety of vitamins to improve their cultivability. These include water-soluble vitamins, such as the B vitamins, which are a broad category of small molecules that are important for cell metabolism but otherwise do not necessarily share structural or functional characteristics.⁹ In microbial studies the use of sequencing techniques is very common for identification of microorganisms in a certain habitat or niche. However, there is a discrepancy between the diversity that one can identify by culture techniques and by sequencing techniques. While the diversity of bacterial species identified by NGS techniques is very high, the number of culturable bacteria and fungi is much lower. With the growth of microbial research, new efforts to optimize culture-based techniques now allow the cultivation of previously uncultivated microbiome bacteria.^{1,2}

Features and Benefits

- Convenient ready-made solution to speed up media preparation
- Sterile solution
- Optimal mixture for growth of fastidious bacteria as well as diversified culturing of microbial samples

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Reagent

10 mL vitamin mix solution	mg/L
Biotin	2
Folic acid	2
Pyridoxine-HCl	10
Thiamine-HCl × 2 H ₂ O	5
Riboflavin	5
Nicotinic acid	5
D-Ca-pantothenate	5
Cyanocobalamine	0.1
<i>p</i> -Aminobenzoic acid	5
Lipoic acid	5
KH ₂ PO ₄	900

Storage/Stability

Store this product at -20 °C. Protect from light.

Preparation Instructions

Concentration 100×

References

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