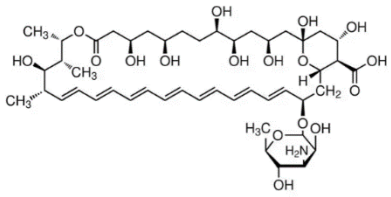
Product Information

MilliShot™ Amphotericin B Ready Made Solution

0.2 µm Filtered, BioReagent, Suitable for Cell Culture

A9570

Storage Temperature –20 °C
CAS Number: 1397-89-3
Concentration: 250 µg/mL



Molecular Formula: $C_{47}H_{73}NO_{17}$

Molecular Weight: 924.08

Melting Point: >170 °C with decomposition

Product Description

The MilliShot™ Amphotericin B Ready Made Solution is a polyene antifungal agent derived from the bacterium, *Streptomyces nodosus*. It functions by binding to ergosterol, a vital component of fungal cell membranes, disrupting membrane integrity and forming pores that lead to cell death.

This antifungal agent is widely used in microbial and cell culture applications to prevent fungal contamination in mammalian cell cultures, making it especially valuable for sensitive eukaryotic cells. Additionally, the MilliShot™ Amphotericin B Solution is employed in antifungal susceptibility testing, allowing researchers to assess the efficacy of various antifungal agents against specific fungal strains. It is crucial for maintaining sterility in cell cultures where fungal contamination could compromise experimental outcomes.

The MilliShot™ Amphotericin B Solution is prepared as a solution in deionized water, with added components like sodium deoxycholate, sodium chloride, and sodium phosphate to enhance solubility. The optimal working concentration is achieved by adding a single vial to 500 mL media. This concentration effectively inhibits fungal growth while minimizing any potential adverse effects on cell viability and function.

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.

Storage and Stability

Store MilliShot™ Amphotericin B Ready Made Solution at -20 °C, protected from light. The product is stable for at least 2 years in its supplied form.

References

1. Kauffman, C. A., & Hachem, R. (2006). "Amphotericin B: A review of its use in the treatment of fungal infections." *Clinical Infectious Diseases*, 43(4), 435-441.
2. Pappas, P. G., et al. (2009). "Invasive fungal infections: A review of the epidemiology, diagnosis, and treatment." *Critical Care Medicine*, 37(5), 1977-1983.
3. Perfect, J. R., et al. (2003). "Amphotericin B: A critical review of its use in fungal infections." *Clinical Infectious Diseases*, 37(10), 1416-1423.
4. Ostrosky-Zeichner, L., et al. (2003). "Amphotericin B: A review of its pharmacology and clinical use." *Clinical Microbiology Reviews*, 16(4), 697-715.
5. Walsh, T. J., et al. (2008). "Fungal infections: A global perspective." *Nature Reviews Microbiology*, 6(1), 1-10.
6. Matzneller, P., et al. (2019). "Pharmacokinetics and pharmacodynamics of amphotericin B." Antimicrobial Agents and Chemotherapy, 63(5), e02488-18.

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