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Product Information

85883 Streptomyces Medium

A special optimized medium for the growth of *Streptomyces* species. The formulation was developed from R&D according the customer needs working with *Streptomyces* species.

Store prepared media below 8 °C, protected from direct light. Store dehydrated powder in a dry place in tightly-sealed containers at 2-25 °C.

Appearance: Yellow coloured, homogeneous, free flowing powder.
Colour and Clarity: Light amber coloured, clear solution.

Directions:
Suspend 84 g in 1 litre distilled water and bring to the boil to dissolve. Sterilize by autoclaving at 121°C for 15 minutes.

Principle and Interpretation:
Streptomyces belongs to the Actinobacteria, it is a group containing Gram-positive cell wall and most of them produce spores. Streptomycetes are found predominantly in soil and in decaying vegetation.
Streptomycetes produce most of the clinically useful antibiotics of natural origin (e.g., neomycin, chloramphenicol, streptomycin …). Streptomycetes are infrequent pathogens, though infections in human and plants.

In the biotechnology *Streptomyces spp.* are interesting for production of recombinant human proteins. The reason of this interest is the glycosylation and protein folding which is better than *E. coli* and other organisms. *Streptomyces spp.*

Cultural characteristics after 18-48 hours at 30°C

Organisms (ATCC)	Growth
Streptomyces achromogenes (12767)	+++
Streptomyces albus (3004)	+++
Streptomyces lavendulae (8664)	+++

References:

1. The Family Streptomycetaceae, Part I: Taxonomy - The Prokaryotes
2. Madigan M; Martinko J (editors). (2005). Brock Biology of Microorganisms, 11th ed., Prentice Hall.
3. Kieser, T., Bibb, M. J., Buttner, M. J., Chater, K. F., and Hopwood, D. A. (2000). Practical Streptomyces Genetics, 2nd edn., Norwich, UK: John Innes Foundation.
4. Binnie C, Cossar J, Stewart D (1997). "Heterologous biopharmaceutical protein expression in Streptomyces". Trends Biotechnol 15 (8): 315–20