Biosynthesis of Rifamycine

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With washed mycelium of *Streptomyces mediterranei* producing Rifamycin B the transformation of Rifamycin S (SV) to Rifamycin B was investigated [1,2].

New protein synthesis is not necessary for this reaction, which is connected with the carbohydrate metabolism. On the basis of our experiments Rifamycin S (SV) should be an intermediate in the biosynthesis of Rifamycin B. During the growth of *Streptomyces mediterranei* producing Rifamycin B, little amounts of Rifamycin S (SV) could be detected. A mutant strain of *Streptomyces mediterranei*, which mainly produces Rifamycin S (SV) with and without barbiturate in the medium, was also isolated. With washed mycelium of this new strain no Rifamycin S (SV) → B transformation occurred.

References

1. Lancini, G. C. and Sensi, P.: Studies in the final steps in rifamycins biosynthesis. Proceedings of the 5th International Congress of Chemotherapy. Ed. K. H. Spitzzy and H. Haschek. Verlag der Wiener Medizinischen Akademie, Wien, Vol. I, p. 41 (1967).