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) \(\rightarrow\) B transformation occurred.

References