Studies on the Antibiotic Substances from Actinomyces.

(4th Report)

Isolation of Streptomycin.

By

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In the first step of our systematic study of antagonistic actinomyces, we have isolated 360 antagonistic actinomyces by "streak plate method" (so-called "primary screening"¹⁾), out of 1,800 strains and we could recognize 6 strains of *Str. griseus* as streptomycin producing according to their specific antibiotic spectrum and growth ability on the streptomycin containing agar.²⁾

Str. griseus No. 346 was cultivated in Thornberry's media by surface culture method, and after the potency reached its maximum, streptomycin was extracted as its hydrochloride by the procedure described by both Cartor et al.³⁾ and by Vander Brook et al.⁴⁾ Crude hydrochloride thus obtained was purified further by chromatographic process and we could obtain almost pure streptomycin hydrochloride (800 u/mg). From this, streptomycin reineckate (decomp. P. 163–166°C) was also crystallized.

References.

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