Use of partially purified Polyoxin B for forming protoplasts

C. P. Selitrennikoff

Follow this and additional works at: <https://newprairiepress.org/fgr>

This work is licensed under a [Creative Commons Attribution-Share Alike 4.0 License](https://creativecommons.org/licenses/by-sa/4.0/).

Recommended Citation

Selitrennikoff, C. P. (1984) "Use of partially purified Polyoxin B for forming protoplasts," *Fungal Genetics Reports*: Vol. 31, Article 18. <https://doi.org/10.4148/1941-4765.1612>

This Technical Note is brought to you for free and open access by New Prairie Press. It has been accepted for inclusion in Fungal Genetics Reports by an authorized administrator of New Prairie Press. For more information, please contact cads@k-state.edu.

Use of partially purified Polyoxin B for forming protoplasts

Abstract

Use of partially purified Polyoxin B for forming protoplasts

Selitrennikoff, C. P.

Use of partially purified Polyoxin B
for forming protoplasts.

alternative, partially purified (40%) polyoxin was used and found to be as effective in promoting protoplasts as was purified (b 70%) polyoxin. Simply, AL Wettable Powder is made to 10% in water (100 mls), the insoluble material filtered using Whatman #1 paper and the dark brown filtrate adsorbed to a granular Norite column, washed with H₂O, and eluted with 60% acetone. The acetone was removed and the brown powder dissolved in H₂O, filtered, sterilized, and stored frozen at -20° C until used (up to six months without detectable loss of activity). A granular Norite column is extremely fast flowing so that the entire partial purification procedure requires less than a day. If the Norite column step is omitted, i.e., if crude polyoxin is used, then protoplast formation is inhibited. (Supported by National Science Foundation award PCM 8112212.)

- Department of Anatomy, University of Colorado Health Sciences Center, Denver, CO 80262.

The formation of stable protoplasts from os-1 (NM233t) (FGSC #4493 or 4494) mycelial cultures involves the germination of macroconidia in Vogel's medium N containing 10% sorbose and 200-400 µg/ml purified Polyoxin B at 37° C (Selitrennikoff et al., 1981 Exper. Mycol. 5: 155-161). Polyoxin B is purified from Polyoxin AL Wettable Powder (Kaken Chemical Co.) by Norite and Dowex chromatography. Although not overly difficult, complete purification is time consuming. As an alter-