



CANADA

IN YOUR REPLY PLEASE QUOTE

FILE NO. ....

NATIONAL RESEARCH LABORATORIES  
DIVISION OF APPLIED BIOLOGY

PRAIRIE REGIONAL LABORATORY

SASKATOON, SASK.

December 4, 1956.

Dr. S.A. Waksman,  
Institute of Microbiology,  
Rutgers University,  
New Brunswick, N.J., U.S.A.

Dear Dr. Waksman:

Since receiving your letter we have concentrated on getting the results you asked for concerning the relationship between candidin and amphotericin B and can now report the following information:

(a) a comparison of the infra-red spectra of samples of each substance taken in this laboratory shows no very important differences. Though there is some variation in the relative intensity of several peaks, the peaks themselves correspond well.

(b) a comparison of the X-ray diffraction patterns of the two substances shows no detectable difference. Lines correspond very well in position but are few in number.

(c) paper chromatograms in two different aqueous alcoholic solvent systems have shown distinct differences in Rf values. Candidin consistently ran slightly behind amphotericin B. (typical Rf values: - candidin 0.40, amphotericin B 0.46). These results are entirely reproducible.

My conclusions are that candidin and amphotericin B are not identical substances, though obviously very closely related. I would assume from your last letter that amphotericin B is of some commercial importance, so I am quite sorry, that the issue has been resolved so disappointingly.

Yours sincerely,

*L. C. Vining*  
Leo C. Vining.

LCV-nc