Colorimetric Assay of Amphotericin B

By J. C. CHANG†, A. B. HONIG, A. T. WARREN, and S. LEVINE

AMPHOTERICIN B, like nystatin, is usually assayed by microbiological methods (1, 2). Following the development of the colorimetric assay of nystatin (3), the method was applied to amphotericin B and promising results were obtained.

The procedure of the assay was the same as for nystatin (3), except that the concentration of amphotericin B solution was about 80 mcg./ml. and absorbance measurements were made at 435 mμ. Results of assays of several samples of powder are shown in Table I.

The colorimetric assays show good reproducibility with a standard deviation of about 2%. The results agree well with the microbiological assays which have a standard deviation of about 2.7%.

It was observed that the absorbance of the color extracted into chloroform was lower if the amphotericin B solution was allowed to stand in the presence of sodium hydroxide, indicating that this method, as in the case of nystatin, may also be a stability assay for amphotericin B. Stability experiments and assays of pharmaceutical preparations are now in progress.

TABLE I.—COLORIMETRIC ASSAY OF AMPHOTERICIN B

Sample[a]	Colorimetric Assay[b] (mcg./mg.)	Average (mcg./mg.)	Microbiological Assay[c] (mcg./mg.)
Powder #1	807		
	809		
	772		
	781	792	801
Powder #2	828		
	816		
	820		
	819	821	786
Powder #3	771		
	760		
	765	765	743
Powder #4	877		
	879		
	832	863	864
Powder #5	866		
	886		
	883	878	879
Powder #6	789		
	805	797	802
Powder #7	941		
	920		
	895		
	903	915	908
Powder #8	764		
	796		
	783		
	794		
	804	788	825

[a] Stored at 0° and colorimetric assays performed over a 4-month period. [b] Each value represents an individual assay with an independent sample preparation. [c] Assayed by the turbidimetric method using *Candida tropicalis*.

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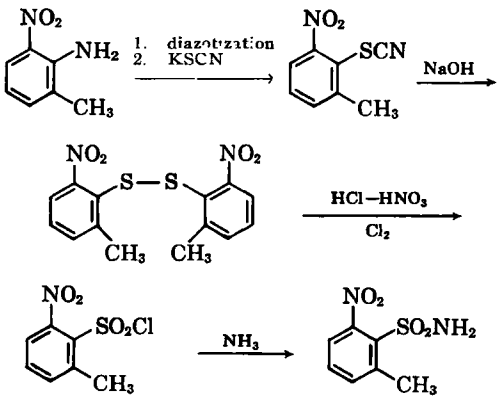
† Present address: Department of Chemistry, University of California, Los Angeles 24.

Saccharin Derivatives VII. Synthesis of 7-Nitrosaccharin and 7-Aminosaccharin

By GLENN H. HAMOR

RECENT work has shown that alkyl 4-amino-2-sulfamoylbenzoates possessing marked anticonvulsant activity may be prepared by alcoholysis of 6-nitrosaccharin, followed by reduction (1). Therefore, the preparation of 7-nitrosaccharin was undertaken as a starting material for synthesis of further compounds to be used in a structure-activity correlation study of anticonvulsants. In addition 7-aminosaccharin was synthesized in the hope that it, along with 7-nitrosaccharin, might give useful information concerning the relationship of chemical structure to taste (2).

The parent compound, 6-nitro-*o*-toluenesulfonamide (I), was prepared by the method of Szabo (3) according to the series of reactions shown below.



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