

การวิเคราะห์ยาในกลุ่มอะมิโนทิตยภูมิ โดยไซฟลูออเรสคามีน



นางสาวจินตนา หวังบุญสกุล

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาเภสัชศาสตรมหาบัณฑิต

ภาควิชาเภสัชเคมี

บัณฑิตวิทยาลัย จุฬาลงกรณ์มหาวิทยาลัย

พ.ศ. 2528

ISBN 974-564-520-6

009605

DETERMINATION OF SECONDARY AMINE DRUGS
USING FLUORESCAMINE

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A Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Science in Pharmacy
Department of Pharmaceutical Chemistry
Graduate School
Chulalongkorn University

1985

Thesis Title Determination of Secondary Amine Drugs Using
 Fluorescamine

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ชื่อนิสิต	นางสาวจินตนา หวังบุญสกุล
อาจารย์ที่ปรึกษา	รองศาสตราจารย์ ดร. สุนิพันธ์ ภูมิมางกูร ผู้ช่วยศาสตราจารย์คาราวัลย์ ธัญญะวุฒิ
ภาควิชา	เภสัชเคมี
ปีการศึกษา	2527



บทคัดย่อ

Fluorescamine ทำปฏิกิริยากับสารในกลุ่มอะมีโนปฐมภูมิและทุติยภูมิ ให้สาร fluorescent pyrrolinone และ nonfluorescent aminoenone ตามลำดับ การวิเคราะห์โดยวิธี UV spectrophotometry ได้นำมาใช้หาปริมาณยาในกลุ่มอะมีโนทุติยภูมิ ยาในกลุ่มอะมีโนทุติยภูมิที่ใช้ในการศึกษาเรื่องนี้มี ephedrine, pseudoephedrine, phenylephrine, epinephrine, metoprolol, propranolol และ piperazine การทดลองนี้ได้มีการศึกษาผลของสภาวะต่าง ๆ ของการทดลองต่อปฏิกิริยา พบว่ายาในกลุ่มอะมีโนทุติยภูมิสามารถวิเคราะห์ได้ควยวิธีง่าย ๆ โดยใช้สาร fluorescamine ซึ่งสามารถเปรียบเทียบผลได้เมื่อเทียบกับวิธี USP



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ABSTRACT

Fluorescamine reacts with primary and secondary amines to form fluorescent pyrrolinones and nonfluorescent aminoenone type chromophores, respectively. A UV spectrophotometric method has been developed for the quantitative determination of secondary amine drugs. Ephedrine, pseudoephedrine, phenylephrine, epinephrine, metoprolol, propranolol and piperazine were used as secondary amine drugs in this evaluation. This experiment deals with studies on the reactions under various experimental conditions. It was shown that secondary amine drugs can be assayed with a very simple procedure using fluorescamine comparable to the official USP method.



ACKNOWLEDGEMENTS

The author is grateful to Associate Professor Dr. Sunibhond Pummangura and Assistant Professor Darawan Thanyavuthi, Department of Pharmaceutical Chemistry, Faculty of Pharmaceutical Sciences, Chulalongkorn University, for their Guidance, assistance and support of this study.

A sincere appreciation is extended to Miss Paipan Phitayanon, Institute of Health Research, Chulalongkorn University, for her statistical advice.

The helpful cooperation of the staff members of the Department of Pharmaceutical Chemistry, Faculty of Pharmaceutical Sciences, Chulalongkorn University is appreciated.

Finally, The author thanks the Graduate School, Chulalongkorn University, for providing partial financial support.



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