DISCOVERY OF BIOLOGICALLY ACTIVE COMPOUNDS FROM COMBINATORY LIBRARY BY AFFINITY CAPILLARY ELECTROPHORESIS USING BIO-RECEPTOR AS STATIONARY PHASE

HUI-MING YU

A THESIS SUBMITTED TO THE GRADUATE SCHOOL IN

PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

IN BIOTECHNOLOGY

ISBN 974-658-733-1

GRADUATE SCHOOL
CHIANG MAI UNIVERSITY
SEPTEMBER 2004

DISCOVERY OF BIOLOGICALLY ACTIVE COMPOUNDS FROM COMBINATORY LIBRARY BY AFFINITY CAPILLARY ELECTROPHORESIS USING BIO-RECEPTOR AS STATIONARY PHASE

HUI-MING YU

THIS THESIS HAS BEEN APPROVED TO BE A PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN BIOTECHNOLOGY

EXAMINING COMMITTEE

Sance Mulvalent	. CHAIRPERSON
Assoc. Prof. Dr. Suree Phutrakul	CHAIRI ERDON
Shit den	. MEMBER
Prof. Dr. Shui-Tein Chen	
F. Sollhow—	. MEMBER
Asst. Prof. Dr. Boonyaras Sookkheo	
DODYNIEN H. Niamoup 2 Ma	. MEMBER
Asst. Prof. Dr. Hataichanoke Niamsup	
Danarat Tongkas	. MEMBER
Lect. Dr. Dararat Tongkao	
9 September 2004	

© Copyright by Chiang Mai University

ACKNOWLEDGEMENTS

I express my sincere appreciation to Assoc. Prof. Dr. Suree Phutrakul, Prof. Dr. Shui-Tein Chen, Asst. Prof. Dr. Boonyaras Sookkheo, Asst. Prof. Dr. Hataichanok Niamsup and Lect. Dr. Dararat Tongkao for their kind advice, encouragement and support throughout my research.

I am gratefully thanks Prof. Kung-Tung Wang, Assoc. Prof. Ming-Jen Tseng, and Prof. Jim-Min Fang, for their many useful suggestions and helpful in my researches. Thanks Dr. Supachock Sinchaikul, Dr. Ying-Ta Wu, and Dr. Chun-Ming Huang, for their valuable cheerful and introduction.

I am grateful to the Institute of Biological Chemistry, Academia Sinica, Taipei, Taiwan for supporting all researches in Taiwan.

Finally, I would like to thank my family for their tender love and constant support. Especially, I would like to thank my father (余清心) for his unselfish love and support.

All rights reesets a copyright of the copyrights of the copyrights