

**PRODUCTION AND CHARACTERIZATION OF RECOMBINANT
METHIONINE SYNTHASE OF *Plasmodium falciparum***

KITSANAPONG REAKSUDSAN

**MASTER OF SCIENCE
IN BIOCHEMISTRY**

**THE GRADUATE SCHOOL
CHIANG MAI UNIVERSITY**

JULY 2013

**PRODUCTION AND CHARACTERIZATION OF RECOMBINANT
METHIONINE SYNTHASE OF *Plasmodium falciparum***

KITSANAPONG REAKSUDSAN

**A THESIS SUBMITTED TO THE GRADUATE SCHOOL IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
MASTER OF SCIENCE
IN BIOCHEMISTRY**

**THE GRADUATE SCHOOL
CHIANG MAI UNIVERSITY**

JULY 2013

**PRODUCTION AND CHARACTERIZATION OF RECOMBINANT
METHIONINE SYNTHASE OF *Plasmodium falciparum***

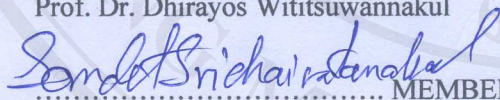
KITSANAPONG REAKSUDSAN

**THIS THESIS HAS BEEN APPROVED
TO BE A PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF SCIENCE
IN BIOCHEMISTRY**

EXAMINING COMMITTEE

.....CHAIRPERSON

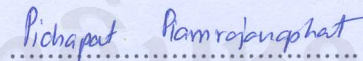
Prof. Dr. Dhirayos Wititsuwannakul

.....MEMBER

Assoc. Prof. Dr. Somdet Srichairattanakul

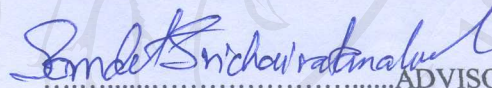
.....MEMBER

Dr. Chairat Uthaipibull


.....MEMBER

Asst. Prof. Dr. Pichapat Piamrojanabhat

THESIS ADVISORY COMMITTEE

.....ADVISOR

Assoc. Prof. Dr. Somdet Srichairattanakul

.....CO-ADVISOR

Dr. Chairat Uthaipibull

5 July 2013

©Copyright by Chiang Mai University

ACKNOWLEDGEMENTS

Firstly, I wish to express my sincere gratitude and deep appreciation to Assoc. Prof. Dr. Somdet Srichairattanakul, and Dr. Chairat Uthaipibull, my advisor and co-advisor, for their special efforts, patient guidance, precious advices, and persistent encouragements from the initial to the final level enabled me to develop an understanding of the subject.

I owe my deepest gratitude to all staff members and colleagues in the Protein-Ligand engineering and molecular biology laboratory, National Center for Genetic Engineering and Biotechnology (BIOTEC), National Science and Technology Development Agency (NSTDA) for their assistance, kindness and friendship. I also would like to thanks Ms. Kanokwan Kulprachakarn for her experimental training and kindness.

I would like to express my deepest appreciation to my family, especially my mother, whom were especially supportive and extremely helpful, for their love, understanding, emotional assistance, and encouragement.

I am indebted to Thailand Graduate Institute of Science and Technology (TGIST), National Science and Technology Development Agency (NSTDA) for financial support and thank Medical Faculty Endowment Fund for partial support.

Lastly, I offer my regards and blessings to all of those who supported me in any respect during the completion of my thesis.

Kitsanapong Reaksudsan