

VU Research Portal

A new target for an old enemy

Ortega Ugalde, S.

2020

document version

Publisher's PDF, also known as Version of record

[Link to publication in VU Research Portal](#)

citation for published version (APA)

Ortega Ugalde, S. (2020). *A new target for an old enemy: The Cytochrome P450 system from Mycobacterium tuberculosis*. [PhD-Thesis - Research and graduation internal, Vrije Universiteit Amsterdam].

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

E-mail address:

vuresearchportal.ub@vu.nl

Table of contents

Chapter 1	General introduction and aim of the thesis	7
Chapter 2	Function, essentiality, and expression of Cytochrome P450 enzymes and their cognate redox partners in <i>Mycobacterium tuberculosis</i> : are they drug targets?	37
Chapter 3	Engineering a self-sufficient <i>Mycobacterium tuberculosis</i> CYP130 by gene fusion with the reductase-domain of CYP102A1 from <i>Bacillus megaterium</i>	65
Chapter 4	Linking Cytochrome P450 enzymes from <i>Mycobacterium tuberculosis</i> to their cognate ferredoxin partners	91
Chapter 5	Luminogenic substrates as a screening tool for identification of inhibitors for bacterial Cytochrome P450 enzymes: Application to <i>Mycobacterium tuberculosis</i>	119
Chapter 6	Evaluation of acetylene containing cYY-analogs as mechanism-based inhibitors of CYP121A1 from <i>Mycobacterium tuberculosis</i>	143
Chapter 7	Summary, conclusions and future perspectives	177
Appendix	Nederlandse samenvatting	193
	Acknowledgements	199
	Curriculum Vitae	200
	List of publications	201