



Universiteit
Leiden
The Netherlands

The use of activity based protein profiling to study proteasome biology

Paniagua Soriano, Guillem

Citation

Paniagua Soriano, G. (2016, February 11). *The use of activity based protein profiling to study proteasome biology*. Retrieved from <https://hdl.handle.net/1887/37766>

Version: Corrected Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/37766>

Note: To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/37766> holds various files of this Leiden University dissertation.

Author: Paniagua Soriano, Guillem

Title: The use of activity based protein profiling to study proteasome biology

Issue Date: 2016-02-11

The Use of Activity-Based Protein Profiling to Study Proteasome Biology

PROEFSCHRIFT

ter verkrijging van

de graad van Doctor aan de Universiteit van Leiden,

op gezag van Rector Magnificus prof. Mr. C.J.J.M. Stolker,

volgens besluit van het College voor Promoties

te verdedigen op donderdag 11 February 2016

klokke 10:00 uur

door

Guillem Paniagua Soriano

geboren te Valencia in 1984

Prommotiecommissie

Promotor: Prof. Dr. H. S. Overkleeft

Co-promotor: Dr. B. I. Florea

Overige leden: Prof. Dr. J. Brouwer

Prof. Dr. C. Driessen

Prof. Dr. H. Ovaa

Dr. S. van Kasteren

Dr. C. Berkers

Table of Contents

Chapter 1:

General Introduction	7
----------------------	---

Chapter 2:

Towards Understanding Induction of Oxidative Stress and Apoptosis by Proteasome Inhibitors	15
--	----

Chapter 3:

An Overview of Direct and Two-Step Activity-Based Proteasome Profiling Strategies	43
---	----

Chapter 4:

Comparative Activity-Based Proteasome Profiling in Zebrafish and Mice	55
---	----

Chapter 5:

Proteasome Inhibitor-Adapted Myeloma Cells Show Proteomic Alterations that Suggest Complex Changes in Metabolic Pathways	65
--	----

Chapter 6:

Summary and Future Prospects	81
------------------------------	----

Resumen	87
Curriculum Vitae	89
List of Publications	91

a mi familia

