

Table of Contents
Contributions to Nephrology, Vol. 141
“Proteomics in Nephrology”
Editors: Thongboonkerd V, Klein JB
Publisher: KARGER

Preface: Thongboonkerd V, Klein JB

Part I: Overview

- 1. Overview of proteomics**
Klein JB, Thongboonkerd V

Part II: Principles of Commonly Used Proteomic Techniques

- 2. Sample preparation for 2-D proteomic analysis**
Thongboonkerd V, Klein E, Klein JB
- 3. Two-dimensional gel electrophoresis: a fundamental tool for expression proteomics studies**
Klein E, Klein JB, Thongboonkerd V
- 4. Applications of mass spectrometry in proteomics**
Pierce WM, Cai J
- 5. Mass spectrometric approaches to quantitative proteomics**
Sechi S
- 6. Practical bioinformatics for proteomics**
Thongboonkerd V, Klein JB
- 7. Clinical proteomics: application at the bedside**
Petricoin EF, Liotta LA

Part III: Applications of Proteomics to Nephrology

- 8. Proteomics and nephrotoxicity**
Witzmann FA, Li J
- 9. Proteomics and sodium transport**
Ecelbarger C

10. Proteomics and diabetic nephropathy

Thongboonkerd V, Barati M, McLeish KR, Pierce WM, Epstein PN, Klein JB

11. Urinary proteomics of renal Fanconi syndrome

Cutillas PR, Norden AG, Cramer R, Burlingame AL, Unwin RJ

12. Application of mass spectrometry to IgA nephropathy: structural and biological analyses of underglycosylated IgA1 molecules.

Yasuda Y, Horie A, Odani H, Iwase H, Hiki Y

13. Podocyte proteomics

Ransom RF

14. Proteomics and mesangial cell: Serpin, Megsin, and Plasmin

Onogi H, Inagi R, Miyata T, Nangaku M, Kurokawa K

15. Proteomic analysis reveals novel protein targets of S-nitrosylation in mesangial cells

Kuncewicz T, Sheta EA, Goldknopf IL, Kone BC

16. Proteomic approach to identification of novel kinase substrates in mesangial cells

Barati M, Powell DW, McLeish KR

17. Proteomics and hypertension

Thongboonkerd V, Klein JB

18. Proteomic studies in urological malignancies

Ferguson RE, Selby PJ, Banks RE

19. A proteomic analysis of proteins removed by ultrafiltration during extracorporeal renal replacement therapy

Ward RA, Brinkley KA

20. Urinary proteomics and biomarker discovery for glomerular diseases

Thongboonkerd V, Klein JB, Jevans AW, McLeish KR

21. Proteomics and drug discovery

Jain KK

List of Authors (alphabetically)
Contributions to Nephrology, Vol. 141
“Proteomics in Nephrology”

Rosamonde E. Banks
Michelle Barati
Karen A. Brinkley
Alma L. Burlingame
Jian Cai
Rainer Cramer
Pedro R. Cutillas
Carolyn A. Ecelbarger
Paul N. Epstein
Roisean E. Ferguson
Ira L. Goldknopf
Yoshiyuki Hiki
Akeyo Horie
Reiko Inagi
Hitoo Iwase
Kewal K. Jain
Anthony W. Jevans
Elias Klein
Jon B. Klein
Bruce C. Kone
Teresa Kunczewicz
Kiyoshi Kurokawa
Junyu Li
Lance A. Liotta
Kenneth R. McLeish
Toshio Miyata
Masaomi Nangaku
Anthony G. W. Norden
Hiroko Odani
Hiroshi Onogi
Emanuel F. Petricoin
William M. Pierce
David W. Powell
Richard F. Ransom
Salvatore Sechi
Peter J. Selby
Essam A. Sheta
Visith Thongboonkerd
Robert J. Unwin
Richard A. Ward
Frank A. Witzmann
Yoshinari Yasuda