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Focal adhesion signaling in acute renal failure

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Abbreviations

| | |
|---------|--|
| 4-OHT | 4-hydroxy-tamoxifen |
| AA | antimycin A |
| ARF | acute renal failure |
| ATP | adenosine triphosphate |
| BSA | bovine serum albumin |
| DCVC | S-(1,2-dichlorovinyl)-L-cysteine |
| DMEM | Dulbecco's modified Eagles medium |
| DOG | 2-deoxy-glucose |
| ECM | extracellular matrix |
| ERK | extracellular signal-regulated kinase |
| FA | focal adhesion |
| F-actin | filamentous-actin |
| FAK | focal adhesion kinase |
| FBS | fetal bovine serum |
| I/R | ischemia/reperfusion |
| ISOM | inner stripe of the outer medulla |
| JNK | c-Jun NH ₂ -terminal kinase |
| KIM-1 | kidney injury molecule 1 |
| MAPK | mitogen-activated protein kinase |
| OSOM | outer stripe of the outer medulla |
| PTC | proximal tubule cells |
| pTyr | phosphorylated tyrosine |
| ROCK | rho kinase |
| ROS | reactive oxygen species |
| TAM | tamoxifen |

List of publications

van de Water B, de Graauw M, Le Dévédec S, Alderliesten M. Cellular stress responses and molecular mechanisms of nephrotoxicity. *Toxicol Lett.* 2006 Mar 15;162(1):83-93.

Alderliesten M, de Graauw M, Oldenampsen J, Qin Y, Pont C, van Buren L, van de Water B. Extracellular signal-regulated kinase activation during renal ischemia/reperfusion mediates focal adhesion dissolution and renal injury. *Am J Pathol.* 2007 Aug;171(2):452-62.

Alderliesten M, Qin Y, Dworniczak B, Beggs H, Ichimura T, van de Water B. Focal Adhesion Kinase Signaling Mediates Ischemia/Reperfusion Induced Acute Renal Failure. *submitted for publication.*

Alderliesten M, Qin Y, Le Dévédec S and Bob van de Water. Focal Adhesion Kinase Mediates Focal Adhesions Recovery after ATP depletion in Primary Mouse Renal Cells. *Submitted for publication.*

Curriculum Vitae

Maaïke Catharina Alderliesten was born on the 21st of September 1980 in Vlaardingen, The Netherlands. She completed her pre-university education in 1998 at S.G. Spieringshoek in Schiedam. That same year Maaïke started her Health Sciences education with a Master in Biological Health Sciences at the University of Maastricht, The Netherlands. In 2001 she started her internship at the department of Human Biology at the University of Maastricht under supervision of Dr. Arjen Bakker. Maaïke obtained her Masters Degree in Health Sciences in November 2002. In October 2002 she started her PhD project at the Division of Toxicology, Leiden/Amsterdam Center for Drug Research (LACDR), Leiden University, under supervision of Prof. Dr. Bob van de Water. This project is funded by the Dutch Science Organization (NWO) and included the research as described in this thesis. Currently Maaïke is working as a postdoc at the Division of Cell Biology at the Netherlands Cancer Institute (NKI) in Amsterdam under supervision of prof. Dr. Marcel Verheij and Dr. Wim van Blitterswijk.

Curriculum Vitae

Maaïke Catharina Alderliesten is geboren op 21 September 1980 in Vlaardingen. In 1998 behaalde ze haar Gymnasium diploma aan S.G. Spieringshoek te Schiedam. Datzelfde jaar begon Maaïke aan haar studie Gezondheidswetenschappen, afstudeerrichting Biologische gezondheidskunde aan de Universiteit Maastricht. In 2001 begon ze aan haar stage bij de vakgroep Humane Biologie van de Universiteit Maastricht onder leiding van Dr. Arjen Bakker. Maaïke behaalde haar doctoraal diploma in november 2002. Van oktober 2002 tot September 2007 werkte ze aan haar promotieonderzoek, beschreven in dit proefschrift, bij de Divisie Toxicologie van het Leiden/Amsterdam Center for Drug Research (LACDR) aan de Universiteit Leiden onder leiding van Prof. Dr. Bob van de Water. Dit project werd gesubsidieerd door NWO. Sinds november 2007 is Maaïke werkzaam as postdoc bij de Divisie Cel Biologie van het Nederlands Kanker Instituut (NKI) in Amsterdam onder leiding van Prof. Dr. Marcel Verheij en Dr. Wim van Blitterswijk.