IN VIVO CHARACTERIZATION OF THE ROLE OF
HISTONE DEACETYLASE 3 IN METABOLIC
AND TRANSCRIPTIONAL REGULATION

By

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TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>ii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>xi</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>xii</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Nucleosomes</td>
<td>1</td>
</tr>
<tr>
<td>Chromatin</td>
<td>1</td>
</tr>
<tr>
<td>Histones</td>
<td>2</td>
</tr>
<tr>
<td>Heterochromatin and Euchromatin</td>
<td>6</td>
</tr>
<tr>
<td>Genetic Studies</td>
<td>6</td>
</tr>
<tr>
<td>Chemical Studies</td>
<td>7</td>
</tr>
<tr>
<td>A Repeating Unit</td>
<td>9</td>
</tr>
<tr>
<td>Histone Modifications</td>
<td>13</td>
</tr>
<tr>
<td>N-terminal Histone Tails</td>
<td>13</td>
</tr>
<tr>
<td>The Histone Code</td>
<td>15</td>
</tr>
<tr>
<td>Transcriptional Regulation</td>
<td>16</td>
</tr>
<tr>
<td>Replication and Chromosome Condensation</td>
<td>18</td>
</tr>
<tr>
<td>DNA Repair</td>
<td>20</td>
</tr>
<tr>
<td>Histone Acetylation</td>
<td>21</td>
</tr>
<tr>
<td>Histone Deacetylases</td>
<td>24</td>
</tr>
<tr>
<td>Identification and Classification</td>
<td>24</td>
</tr>
<tr>
<td>Class I</td>
<td>25</td>
</tr>
<tr>
<td>Class IIa, IIb, and IV</td>
<td>27</td>
</tr>
<tr>
<td>Class III (Sirtuins)</td>
<td>32</td>
</tr>
<tr>
<td>Inhibitors and Role in Disease</td>
<td>33</td>
</tr>
<tr>
<td>Histone Deacetylase 3</td>
<td>41</td>
</tr>
<tr>
<td>Transcription Factor and Nuclear Receptor Interactions</td>
<td>45</td>
</tr>
<tr>
<td>II. MATERIALS AND METHODS</td>
<td>51</td>
</tr>
<tr>
<td>Cell Culture and Plasmids</td>
<td>51</td>
</tr>
<tr>
<td><em>In vitro</em> Transcription and Translation</td>
<td>51</td>
</tr>
</tbody>
</table>
Luciferase Assays ................................................................. 52
Co-Immunoprecipitation ...................................................... 52
Flow Cytometry Analysis ...................................................... 53
Methylcellulose Assay (MCA) ............................................... 53
Antibodies ............................................................................. 53
Generation of Hdac3 Knockout Mice ....................................... 54
Generation of Liver-specific Hdac3 Knockout Mice .................... 57
In vivo Inhibitor Treatment ................................................... 57
Genotyping of Conditional and Transgenic Hdac3 Deletion Mice 58
Preparation of Bone Marrow and Liver Lysates ........................ 59
Histology and Immunohistochemistry ..................................... 59
Liver DNA and RNA Extraction, Q-RT-PCR, and Microarray Analysis 60
Chromatin Immunoprecipitation (ChIP) ................................... 61
Metabolic Analysis ................................................................ 65
Transmission Electron Microscopy (TEM) ................................ 65

III. REGULATION OF HEMATOPOIETIC TRANSCRIPTION FACTOR
RUNX1 AND BONE MARROW HOMEOSTASIS BY HISTONE
DEACETYLASE 3 ........................................................................ 66

Background and Significance .................................................. 66
Results .................................................................................... 69
  Chromatin remodeling enzymes bind RD2 of RUNX1 .............. 69
  RUNX1 RD2 is required for transcriptional repression .......... 73
  Conditional deletion of the Runx1 interacting protein Hdac3 in
total bone marrow............................................................... 75
  Loss of Hdac3 affects the hematopoietic stem cell compartment.. 77
Discussion .............................................................................. 79

IV. LIVER-SPECIFIC DELETION OF HISTONE DEACETYLASE 3 DISRUPTS
METABOLIC TRANSCRIPTIONAL NETWORKS ............................ 84

Background and Significance .................................................. 84
Results .................................................................................... 85
  Liver-specific deletion of Hdac3 results in organ hypertrophy ... 85
  Deletion of Hdac3 leads to increased hepatocellular damage .... 89
  Loss of Hdac3 disrupts metabolic homeostasis ....................... 90
  Lipid and cholesterol biosynthesis regulatory genes are
de-repressed after inactivation of Hdac3 .................................. 94
  Hdac3 inactivation affects histone acetylation ....................... 99
  Loss of Hdac3 increases Pparγ expression and activity in
  hepatocytes ........................................................................... 100
  Inhibition of mTOR affects lipid levels in Alb:Hdac3 Δle mice .... 103
Discussion .............................................................................. 106
V. LOSS OF HISTONE DEACETYLASE 3 INCREASES SUSCEPTIBILITY FOR GENOMIC DAMAGE AND DISEASE DEVELOPMENT ........................................ 109

Background and Significance .............................................................. 109
Results .................................................................................................. 112

- Prolonged loss of Hdac3 leads to endogenous DNA damage
  and increased sensitivity to irradiation ............................................. 112
- Symptoms of NASH develop in Hdac3-null livers ....................... 117
- Liver-specific loss of Hdac3 leads to hepatocellular carcinoma ... 119
Discussion ......................................................................................... 125

VI. SUMMARY AND FUTURE DIRECTIONS ............................................. 129

REFERENCES ...................................................................................... 136
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Schematic of mitosis</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>Original purification scheme for histone proteins</td>
<td>5</td>
</tr>
<tr>
<td>3.</td>
<td>Genetics of heterochromatin and euchromatin in the mealy bug</td>
<td>8</td>
</tr>
<tr>
<td>4.</td>
<td>Nucleosome structure</td>
<td>12</td>
</tr>
<tr>
<td>5.</td>
<td>The histone fold motif</td>
<td>14</td>
</tr>
<tr>
<td>6.</td>
<td>Post-translational modifications of human histone N-terminal tails</td>
<td>17</td>
</tr>
<tr>
<td>7.</td>
<td>Inhibition of RNA polymerase by deacetylated histones</td>
<td>22</td>
</tr>
<tr>
<td>8.</td>
<td>Regulation of cellular localization of class IIa HDACs</td>
<td>29</td>
</tr>
<tr>
<td>9.</td>
<td>Histone deacetylase inhibitors</td>
<td>36</td>
</tr>
<tr>
<td>10.</td>
<td>SAHA binding at the active site in the <em>Aquifex aeolicus</em> histone deacetylase-like protein (HDLP)</td>
<td>38</td>
</tr>
<tr>
<td>11.</td>
<td>Structural organization of HDAC3</td>
<td>42</td>
</tr>
<tr>
<td>12.</td>
<td>Transcriptional regulation of nuclear receptors</td>
<td>49</td>
</tr>
<tr>
<td>13.</td>
<td>Definition of C-terminal sites in RUNX1 that contact HDAC1 and HDAC3</td>
<td>71</td>
</tr>
<tr>
<td>14.</td>
<td>HDACs and SUV39H1 contact sites within the RUNX1 RD2</td>
<td>72</td>
</tr>
<tr>
<td>15.</td>
<td>RUNX1 binds two separate SUV39H1 domains <em>in vitro</em></td>
<td>74</td>
</tr>
<tr>
<td>16.</td>
<td>Residues within the RUNX1 RD2 are required for transcriptional repression</td>
<td>75</td>
</tr>
<tr>
<td>17.</td>
<td>Targeting construct for generation of the <em>Hdac3</em> conditional allele</td>
<td>76</td>
</tr>
<tr>
<td>18.</td>
<td>Down-regulation of Hdac3 expression in total bone marrow of <em>Mx:Hdac3&lt;sup&gt;fl-/&lt;/sup&gt;</em> mice</td>
<td>77</td>
</tr>
<tr>
<td>19.</td>
<td>General schematic of murine hematopoiesis</td>
<td>78</td>
</tr>
</tbody>
</table>
41. Expression levels of HCC molecular markers are increased in Hdac3-null liver ................................................................. 125
42. Peripheral organs are affected in Alb:Hdac3<sup>fl/fl</sup> mice which develop HCC ........ 126
43. Presence of nuclear β-catenin in P28 Alb:Hdac3<sup>0/0</sup> mice ........................................... 134
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Primer sequences for generation of Runx1 $\Delta$379-430 deletion construct</td>
<td>51</td>
</tr>
<tr>
<td>2.</td>
<td>Transgenic and knockout mouse genotyping primer sequences</td>
<td>58</td>
</tr>
<tr>
<td>3.</td>
<td>Q-RT-PCR primer sets</td>
<td>62</td>
</tr>
<tr>
<td>4.</td>
<td>Primer sequences for amplification of designated promoter regions analyzed in ChIP assay</td>
<td>64</td>
</tr>
<tr>
<td>5.</td>
<td>Representative analysis of differentiated hematopoietic lineages in $Mx$:Hdac3 mice 2 days and 1 week post-injection of pIpC</td>
<td>79</td>
</tr>
<tr>
<td>6.</td>
<td>Quantification of metabolic parameters in $Alb$:Hdac3 liver tissue</td>
<td>93</td>
</tr>
<tr>
<td>7.</td>
<td>Quantification of metabolic parameters in $Alb$:Hdac3 serum</td>
<td>94</td>
</tr>
<tr>
<td>8.</td>
<td>Transcriptional changes in $Alb$:Hdac3$^{fl/-}$ at P17 and P28</td>
<td>97</td>
</tr>
</tbody>
</table>
ABBREVIATIONS

ac- acetylated
ADP- adenine diphosphate
ALL- acute lymphoblastic leukemia
ALT- alanine transaminase
AML- acute myeloid leukemia
ATRA- all-trans retinoic acid
bp- base pair
BrdU- bromodeoxy uridine
CaMK- calcium/calmodulin-dependent protein kinase
CHAP1- cyclic hydroxamic acid-containing peptide
ChIP- chromatin immunoprecipitation
CK2- casein kinase 2
CLP- common lymphoid progenitor
CML- chronic myelogenous leukemia
CMP- common myeloid progenitor
CoA- Coenzyme A
DAD- deacetylase domain
DNA- deoxyribonucleic acid
DNA-PK- deoxyribonucleic acid-protein kinase
DOC- sodium deoxycholate
DSB- double strand break
DTT - dithiothreitol
ECM - extracellular matrix
EDTA - ethylene diamine tetraacetic acid
EM - electron microscopy
ER - estrogen receptor
ESC - embryonic stem cell
EtOH - ethanol
FACS - fluorescent activated cell sorting
GDH - glutamate dehydrogenase
GGT1 - gamma-glutamyl transpeptidase 1
GPS2 - G-protein pathway suppressor 2
GR - glucocorticoid receptor
Gy - gray (measurement of radiation absorption)
H&E - hematoxylin and eosin
HAT - histone acetyltransferase
HCC - hepatocellular carcinoma
HDAC - histone deacetylase
HDI - histone deacetylase inhibitor
HDL - high density lipoprotein
IGF2 - insulin-like growth factor 2
IP - intraperitoneal
IR - irradiation
kDa - kilodalton
LDL- low density lipoprotein
LOH- loss of heterozygosity
LSK- lineage negative/c-kit+/Sca-1+ hematopoietic population
LXR- liver X receptor
MCA-methycellulose assay
MDa- megadalton
MEF- mouse embryonic fibroblast
MEF2- myocyte enhancing factor 2
MetS- metabolic syndrome
MPP- multi-potent progenitor
MTG- myeloid translocation gene
mTOR- mammalian target of rapamycin
MW- molecular weight
N-CoR- nuclear corepressor
NAFLD- non-alcoholic fatty liver disease
NASH- non-alcoholic steatohepatitis
NER- nucleotide excision repair
NES- nuclear export signal
NLS- nuclear localization signal
NMR- nuclear magnetic resonance
NR- nuclear receptor
O/N- overnight
PAS- periodic acid Schiff stain
PDB- protein database
PBS- phosphate buffered saline
PCR- polymerase chain reaction
PEG- polyethylene glycol
PHx- partial hepatectomy
pIpC- polyinosinic acid-polycytidylic acid
PML- promyelogenous leukemia
PMSF- phenylmethanesulphonylfluoride
PPAR- peroxisome proliferator-activated receptor
PPRE- peroxisome proliferators response element
PVDF- polyvinylidene fluoride
Q-PCR- quantitative polymerase chain reaction
Q-RT-PCR- quantitative reverse transcriptase polymerase chain reaction
RD- repression domain
RNA- ribonucleic acid
ROS- reactive oxygen species
RT- room temp
RXR- retinoid X receptor
SAHA- suberoylanilide hydroxamic acid
SANT- Swi3/Ada2/N-CoR/TFIIIB
SDS- sodium dodecyl sulfate
SDS-PAGE- sodium dodecyl sulfate polyacrylamide gel electrophoresis
SIR- silent information regulator
siRNA- small interfering RNA
SMRT- silencing mediator of retinoic and thyroid receptors
SOE- splicing by overlap extension
SUMO- small ubiquitin-like modifier
T₃- thyroid hormone
TBL1- transducin β-like 1
TEM- electron microscopy
TR- thyroid hormone receptor
TSA- trichostatin A
TUNEL- terminal transferase dUTP nick end labeling
TZD- thiazolidinediones
VDR- vitamin D receptor
VPA- valproic acid
WCL- whole cell lysate