

Supplemental information

Manuscript : **Gene Expression Mapping of Histone Deacetylases and Co-factors, and Correlation with Survival Time and 1H-HRMAS Metabolomic Profile in Human Gliomas**

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Table S1 : Human primers used for quantitative real-time PCR.

	Forward 5' → 3'	Reverse 5' → 3'
<i>18S</i>	-GGG AGC CTG AGA AAC GGC-	-GGT CGG GAG TGG GTA ATT TG-
<i>HDAC1</i>	-GGA AAT CTA TCG CCC TCA CA-	-CTC GGA CTT CTT TGC ATG GT-
<i>HDAC2</i>	-GAC AGG GTC ATC CCA TGA AG-	-GTC TTA TTG ACC GTA GAA ATT TGA T-
<i>HDAC3</i>	-ACG TGG GCA ACT TCC ACT AC-	-GAC TCT TGG TGA AGC CTT GC-
<i>HDAC4</i>	-AGC GTG AGC AAG ATC CTC AT-	-GCC AAG TAC TCA GCG TCT CC-
<i>HDAC5</i>	-GTG ACA CCG TGT GGA ATG AG-	-AGT CCA CGA TGA GGA CCT TG-
<i>HDAC6</i>	-AAG TAG GCA GAA CCC CCA GT-	-GTG CTT CAG CCT CAA GGT TC-
<i>HDAC7</i>	-CCC AGC AAA CCT TCT ACC AA-	-AAG CAG CCA GGT ACT CAG GA-
<i>HDAC8</i>	-GGT GAC GTG TCT GAT GTT GG-	-AGC TCC CAG CTG TAA GAC CA-
<i>HDAC9</i>	-CCT TCG AAA AAC TGC CTC TG-	-GAC CAG AGC CTG GAG AAC TG-
<i>HDAC10</i>	-TCC ACC CGA GTA CCT TTC AC-	-GAT CCT GTG TAG CCC GTG TT-
<i>HDAC11</i>	-TCT TCC TCC CCA ACT TCC CTT-	-CTC CAC ACG CTC AAA CAG AA-
<i>SIRT1</i>	-GCA GAT TAG TAG GCG GCT TG-	-TCT GGC ATG TCC CAC TAT CA-
<i>SIRT2</i>	-GAG GCC AGG ACA ACA GAG AG-	-TAG AGA TTT GCT GGG GTT GG-
<i>SIRT3</i>	-CAT GAG CTG CAG TGA CTG GT-	-GAG CTT GCC GTT CAA CTA GG-
<i>SIRT4</i>	-CAG CAA GTC CTC CTC TGG AC-	-CCA GCC TAC GAA GTT TCT CG-
<i>SIRT5</i>	-TTC AAA GGC AGA AAC CAA CC-	-CTA ATG CAA AAG CAG CCA CA-
<i>SIRT6</i>	-CCA AGT TCG ACA CCA CCT TT-	-CGG ACG TAC TGC GTC TTA CA-
<i>SIRT7</i>	-CGC CAA ATA CTT GGT CGT CT-	-GTG ATG CTC ATG TGG GTG AG-
<i>PPARGC1A</i>	-CCT GCA TGA GTG TGT GCT CT-	-GCA AAG AGG CTG GTC TTC AC-

<i>PPARGC1B</i>	-AGT GGT GCC CAG AGA ACT CA-	-CGA AGC TGA GGT GCA TGA TA-
<i>NCOR1</i>	-CAT TGC TAG GAG TGA GCA TGA-	-TAG GTG GAA TCA CAG AGA GCT-
<i>NCOR2</i>	-TCA TCT ACG ACG AGA ACC GG-	-ATT GTT TCC GAG CGT GAT TC-
<i>NRIP1</i>	-GTG GAA CAA AGG TCA TGA GTG A-	-CTC GAG AAT ACT GCT GCA AAT G-
<i>RB1</i>	-CAG CAA GTG ATC AAC CTT CA-	-ATT TCG ACA CAA CCC TGT CC-

Table S2 : P-values of 18S normalized expression levels of HDACs and NR co-factors in different brain tumors versus control samples. $p < 0.01$, bold red; $0.01 \leq p < 0.05$, red; ≥ 0.05 , black.

Class I HDACs

Tumor type	<i>HDAC1</i>	<i>HDAC2</i>	<i>HDAC3</i>	<i>HDAC8</i>
GL	9.88E-06	5.49E-01	9.27E-06	3.61E-01
ODII	9.29E-02	4.17E-01	1.97E-01	6.45E-01
ODIII	4.43E-05	5.06E-02	3.28E-02	7.61E-01

Class IV HDACs

Tumor type	<i>HDAC11</i>
GL	7.96E-06
ODII	7.05E-02
ODIII	3.03E-03

Class II HDACs

Tumor type	<i>HDAC4</i>	<i>HDAC5</i>	<i>HDAC6</i>	<i>HDAC7</i>	<i>HDAC9</i>	<i>HDAC10</i>
GL	9.83E-01	7.97E-08	2.24E-04	5.00E-07	4.71E-01	1.12E-04
ODII	2.09E-02	1.60E-01	1.64E-02	9.30E-02	7.93E-01	2.28E-01
ODIII	1.46E-02	5.06E-03	1.05E-05	1.60E-04	4.08E-01	7.34E-06

Class III HDACs

Tumor type	<i>SIRT1</i>	<i>SIRT2</i>	<i>SIRT3</i>	<i>SIRT4</i>	<i>SIRT5</i>	<i>SIRT6</i>	<i>SIRT7</i>
GL	2.51E-01	9.11E-02	1.62E-02	6.65E-02	1.88E-01	1.63E-02	9.50E-02
ODII	2.92E-02	3.99E-01	7.97E-01	1.00E-01	7.14E-01	5.21E-03	8.25E-01
ODIII	8.55E-03	5.12E-01	2.70E-01	3.15E-01	8.15E-01	7.98E-04	1.62E-01

Transcriptional co-factors

Tumor type	<i>PPARGC1A</i>	<i>PPARGC1B</i>	<i>NCOR1</i>	<i>NCOR2</i>	<i>NRIP1</i>	<i>RB1</i>
GL	1.95E-02	8.01E-08	4.09E-01	9.11E-02	1.34E-01	2.38E-03
ODII	3.84E-01	3.21E-02	9.50E-01	1.05E-01	4.77E-01	6.78E-02
ODIII	1.93E-02	4.58E-06	1.93E-01	7.08E-05	1.67E-01	1.97E-03