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Manuscript Title: Comparative Multidimensional Molecular Analyses of Pediatric Diffuse Intrinsic Pontine Glioma Reveals Distinct Molecular

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Online Resource 31

Top Biological Functions	Genes Hypomethylated in H3.3 Mutants & Hypermethylated in Wild Types	Genes Hypermethylated in H3.3 Mutants & Hypomethylated in Wild Types
	Organismal Death (<i>p</i> -value < 0.001)	Inhibition of Autophagy of Brain Cancer Cell (<i>p</i> -value < 0.01)
Gene (Fold Change In Methylation Value, Subgroup 1 / Subgroup 2)	<p><i>ATN1</i> (-5.00); <i>BCL2</i> (-5.27); <i>BRD2</i> (-5.25); <i>CACNB2</i> (-6.05); <i>CAPZA2</i> (-5.28); <i>CGB</i> (-5.17); <i>CPLX1</i> (-6.43); <i>CPT1A</i> (-6.05); <i>CSRNP3</i> (-6.82); <i>DLX1</i> (-6.31); <i>ETHE1</i> (-4.61); <i>F2R</i> (-5.16); <i>F3</i> (-5.06); <i>FGFR3</i> (-4.20); <i>FOXP1</i> (-5.93); <i>FYN</i> (-8.43); <i>GNAS</i> (-4.50); <i>HSP90AB1</i> (-5.10); <i>HTR7</i> (-7.08); <i>IDE</i> (-8.23); <i>IDUA</i> (-6.15); <i>ING1</i> (-5.06); <i>KCNAB2</i> (-5.55); <i>KCNH2</i> (-4.54); <i>KCNQ1</i> (-8.38); <i>KEAP1</i> (-4.66); <i>KIF1A</i> (-19.19); <i>KRIT1</i> (-6.32); <i>MAD1L1</i> (-5.76); <i>MAEA</i> (-5.38); <i>MEF2A</i> (-4.79); <i>MGMT</i> (-23800000.00); <i>NFKB2</i> (-5.80); <i>NOTCH1</i> (-4.78); <i>NRXN2</i> (-6.81); <i>PKD1</i> (-5.90); <i>PLOD3</i> (-4.93); <i>PPARA</i> (-8.16); <i>PPT1</i> (-5.84); <i>PTPRN2</i> (-6.35); <i>RAC1</i> (-7.18); <i>SAV1</i> (-6.48); <i>SIRT1</i> (-6.91); <i>TBK1</i> (-14.91); <i>TJP2</i> (-4.93); <i>TNXB</i> (-5.81); <i>TRRAP</i> (-5.83); <i>TWIST2</i> (-6.38)</p>	<p><i>PRKDC</i> (5.04); <i>RPTOR</i> (5.59); <i>SORCS2</i> (7.11); <i>THBS2</i> (5.81)</p>