Supporting Information

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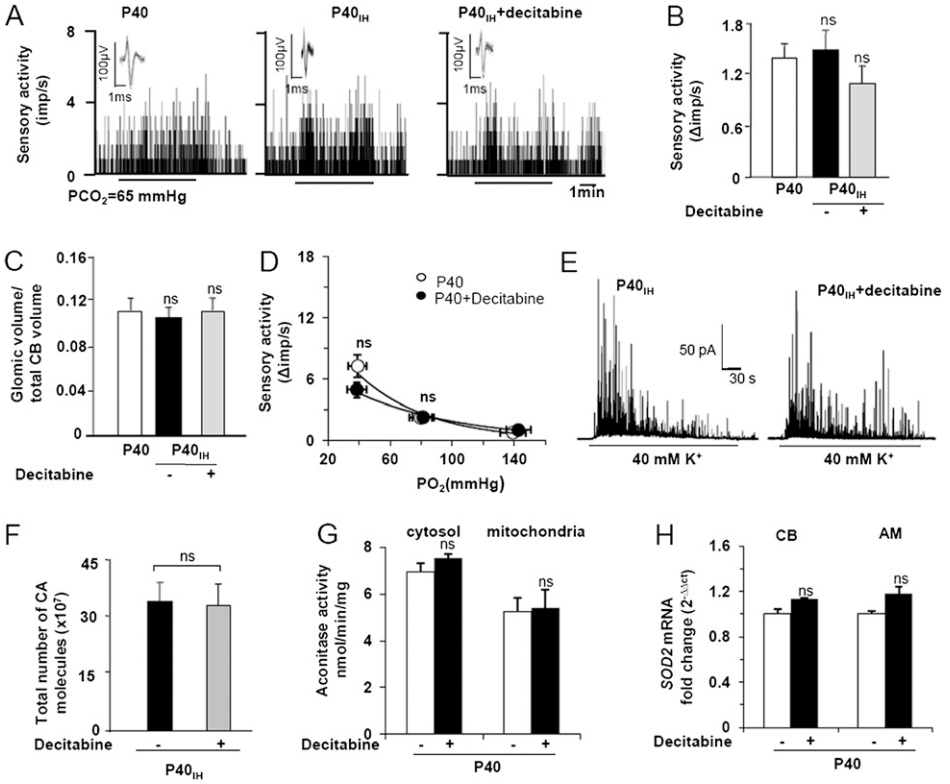

Fig. S1. Effect of neonatal intermittent hypoxia (IH) on carotid body and adrenal chromaffin cell responses in adult rats. (*A*) Isolated superfused carotid body (CB) sensory responses to CO_2 (PCO_2 = 65 mmHg) in postnatal day (P) 40 rats exposed to normoxia (P40; *Left*), neonatal IH ($P40_{IH}$; *Center*), or treated with decitabine during neonatal IH ($P40_{IH}$ + decitabine; *Right*). Black bar represents the duration of the CO_2 challenge. Integrated CB sensory activity presented as impulses per second (imp/s). Superimposed action potential from the "single" fiber from which the data are derived is presented in the inset. (*B*) Mean CB responses to CO_2 from P40, $P40_{IH}$, and $P40_{IH}$ + decitabine-treated rats shown as the difference in response between baseline and hypoxia (Δimp/s). Data presented are mean ± SEM of n = 12 (P40), 14 ($P40_{IH}$), and 18 ($P40_{IH}$ + decitabine) fibers from 10 to 11 rats in each group. (*C*) Analysis of CB morphology. Number of glomus cells (glomic volume) and total CB volume were analyzed in control (P40), neonatal IH ($P40_{IH}$) and neonatal IH + decitabine-treated ($P40_{IH}$ + decitabine) rats by morphometric analysis. Data are expressed as mean ± SEM from n = 4 rats in each group. (*D*) CBs from rats exposed to neonatal normoxia (P40) or neonatal normoxia + decitabine (P40 + decitabine) were isolated, exposed to graded hypoxia, and the difference in response between baseline and hypoxia (Δimp/s) was determined. Data are presented are mean ± SEM of n = 14 (P40) and 18 (P40 + decitabine) fibers from 10 rats each. (*E*) K^+-evoked catecholamine secretion from chromaffin cells that were isolated from P40, $P40_{IH}$, $P40_{IH}$ + decitabine rats. (*F*) Total catecholamine (CA) secreted during K^+ challenge (number of secretory events × CA molecules secreted per event). Data shown are mean ± SEM from n = 12 cells from $P40_{IH}$ and 10 cells from $P40_{IH}$ + decitabine-treated rats from three different litters in each group; n.s., not significant ($P > 0.05$). (*G*). Absence of effects of decitabine on cytosolic and mitochondrial aconitase activities in adrenal medulla from control P40 rats exposed to normoxia in the neonatal period. Data shown are mean ± SEM from n = 4 independent experiments each. (*H*). Analysis of Sod2 mRNA in CB and adrenal medulla (AM) in control P40 rats treated with (+) or without (–) decitabine in the neonatal period. Data are expressed relative to 18S rRNA and are presented as mean ± SEM from n = 4 independent experiments. n.s., $P > 0.05$ for P40 vs. $P40_{IH}$ + decitabine or P40 + decitabine.

Table S1. Nucleotide sequence of primers used for the analysis of cytosine methylation in the *Sod2* gene

Primer	Sequence of forward (For) and reverse (Rev) primers
1	For: 5′-AATATGTTTTGGGGATGAAGTTT-3′
	Rev: 5′-TCCAAAATTTTCAAAAAACTCA-3′
2	For: 5′-GGGGTTTTTTAGAATTAGGAAT-3′
	Rev: 5′-ACAACTAAACRCTAACCCTAC-3′
3	For: 5′-TYGTTTTGTTATAAGTTGGGT-3′
	Rev: 5′-CTTCTACCCRCRCTAAAAA-3′
4	For: 5′-AAGTGGTAGGGTTYGGGG-3′
	Rev: 5′-ACACRAAAAACCTCCAATACA-3′
5	For: 5′-TATTAAYGYGTAGATTATGTAGTTG-3′
	Rev: 5′-AACTCACAATAATAAAAATACATCAA-3′