

Figure S1. Changes in oxygen concentration (lower tracing) in the hypoxia chamber, and partial pressure of oxygen (PaO_2 , upper tracing) in experimental animals responding to hypoxia conditioning.

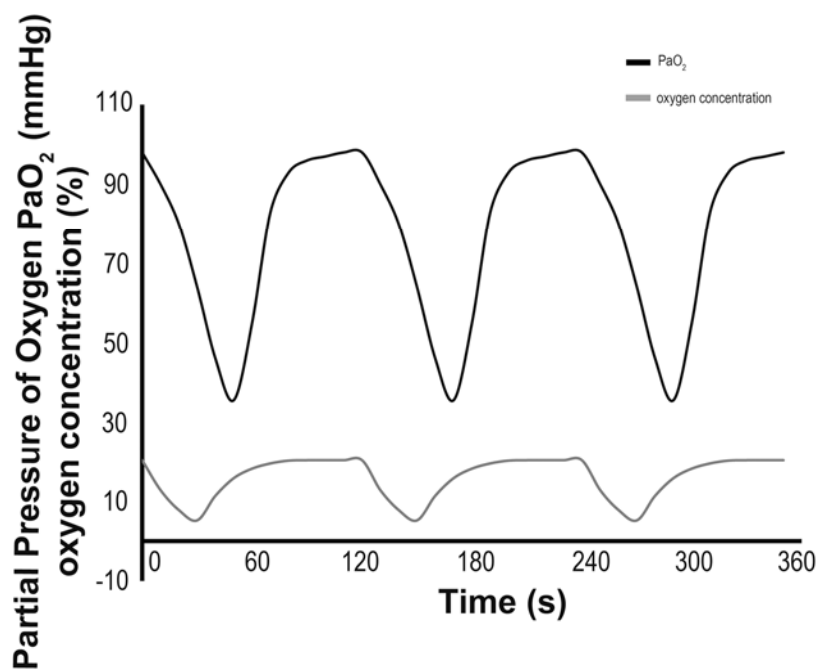


Table S1. Intermittent hypoxia treatment.

Group	Sample size	Frequency (times/h)	Hypoxia time (s)	Re-oxygen time (s)	Minimum oxygen concentration (%)	Total exposure time (weeks)
IH10	8	10	30 s	330 s	5%	6
IH20	8	20	30 s	150 s	5%	6
IH30	8	30	30 s	90 s	5%	6
IH40	8	40	30 s	60 s	5%	6
IH30T0 ^a	8	30	30 s	90 s	5%	6
IH30T29 ^a	8	30	30 s	90 s	5%	6
SC	8	—	—	sustained normal oxygen	sustained normal oxygen	6
NC	8	—	—	—	—	—

Four groups were exposed to intermittent hypoxia (IH) 10, 20, 30, or 40 times/h. ^aTwo other experimental groups were challenged with IH (30 times/h) plus tempol (T), either beginning on day 0 (IH30T0) or on day 29 (IH30T29) to determine whether tempol protected against IH damage. SC: compressed air; NC: normal air.

Table S2. Levels of serum cytokines and tissue proteins in animals of intermittent hypoxia (IH) and control groups.

	SC	IH10	IH20	IH30	IH40
TNF- α (pg/mL)	11.52 \pm 2.55	12.62 \pm 2.81	15.93 \pm 3.17*	20.10 \pm 5.42* [#]	19.87 \pm 4.84* [#]
ICAM-1 (ng/mL)	1.80 \pm 0.55	2.66 \pm 0.79*	3.88 \pm 0.84*	5.36 \pm 1.23* [#] ^{\$}	5.45 \pm 1.27* [#] ^{\$}
IL-10 (pg/mL)	280.94 \pm 55.36	221.40 \pm 52.52*	160.79 \pm 64.91*	101.31 \pm 47.55* [#] ^{\$}	97.85 \pm 33.34* [#] ^{\$}
NF- κ B P65 (arbitrary units)	3.41 \pm 0.53	4.12 \pm 0.58*	4.17 \pm 0.51*	6.36 \pm 0.78* [#] ^{\$}	6.14 \pm 0.70* [#] ^{\$}
HIF-1 α (arbitrary units)	3.06 \pm 0.48	4.09 \pm 0.61*	4.30 \pm 0.69*	5.29 \pm 0.83* [#] ^{\$}	6.02 \pm 0.83* [#] ^{\$}

Data are reported as means \pm SD. Animals were exposed to intermittent hypoxia (IH) 10, 20, 30, or 40 times/h or compressed air (SC) (n=8 animals/group). TNF- α : tumor necrosis factor; ICAM-1: intracellular adhesion molecule-1; IL-10: interleukin-10; NF- κ B: nuclear factor kappa B; HIF-1 α : hypoxia inducible factor-1 α . *P<0.05 vs SC; [#]P<0.05 vs IH10; ^{\$}P<0.05 vs IH20 (one-way ANOVA and *post hoc* Tukey's test).

Table S3. Levels of serum cytokines and tissue proteins in tempol-treated animals compared to control and IH30 groups.

	SC	IH30	IH30T29	IH30T0
TNF- α (pg/mL)	11.52 \pm 2.55* [#] ^{\$}	20.10 \pm 5.42	17.32 \pm 3.45	15.72 \pm 4.16*
ICAM-1 (ng/mL)	1.80 \pm 0.55* [#] ^{\$}	5.36 \pm 1.23	3.88 \pm 0.86*	2.76 \pm 0.92* [#]
IL-10 (pg/mL)	280.94 \pm 55.36* [#] ^{\$}	101.31 \pm 47.55	162.93 \pm 58.37*	219.04 \pm 53.15* [#]
NF- κ B P65 (arbitrary units)	3.41 \pm 0.53* [#] ^{\$}	6.36 \pm 0.78	4.90 \pm 0.65*	4.12 \pm 0.64* [#]
HIF-1 α (arbitrary units)	3.06 \pm 0.48* [#] ^{\$}	5.29 \pm 0.83	4.55 \pm 0.56*	3.74 \pm 0.57* [#]

Data are reported as means \pm SD. Animals were exposed to intermittent hypoxia (IH) 30 times/h, with or without tempol (T) at 0 or 29 days, or compressed air (SC) (n=8 animals/group). TNF- α : tumor necrosis factor; ICAM-1: intracellular adhesion molecule-1; IL-10: interleukin-10; NF- κ B: nuclear factor kappa B; HIF-1 α : hypoxia inducible factor-1 α . *P<0.05 vs IH30; [#]P<0.05 vs IH30T29; ^{\$}P<0.05 vs IH30T0 (one-way ANOVA and *post hoc* Tukey's test).