

Table S3 Results obtained for the measurement of spontaneous breathing pattern of ADAR2 ko (ko) and control (ct) mice. Data are represented as mean \pm standard error of mean

Characterization of the mice								
Parameter	ct (A)			ko (B)			A ~ B	
	male	female	p-value	male	female	p-value	male	female
	(n=6)	(n=6)		(n=5)	(n=6)		p-value	p-value
bw [g]	31.8 \pm 1.4	24.8 \pm 1.1	< 0.01	34.7 \pm 0.3	24.1 \pm 0.6	< 0.001	n.s.	n.s.
age [d]	133.5 \pm 0.3	133.8 \pm 0.5	n.s.	133.2 \pm 0.4	133.7 \pm 0.4	n.s.	n.s.	n.s.
mean_f [1/min]	446.2 \pm 12.9	428.4 \pm 26.7	n.s.	485.7 \pm 10.3	458.6 \pm 12.7	n.s.	n.s.	n.s.
Respiratory rate and timing at rest and activity								
Rest								
f [1/min]	362.3 \pm 12.5	363.8 \pm 11.6	n.s.	390.4 \pm 2.7	372.2 \pm 10.8	n.s.	n.s.	n.s.
Ti [ms]	54.0 \pm 0.7	47.5 \pm 1.3	< 0.01	48.4 \pm 1.0	46.4 \pm 1.5	n.s.	< 0.01	n.s.
Te [ms]	112.6 \pm 5.2	118.2 \pm 4.2	n.s.	105.3 \pm 1.2	115.5 \pm 4.2	n.s.	n.s.	n.s.
Ti/TT	0.33 \pm 0.01	0.29 \pm 0.00	< 0.01	0.32 \pm 0.01	0.29 \pm 0.01	< 0.05	n.s.	n.s.
Activity								
f [1/min]	474.3 \pm 9.2	476.3 \pm 11.4	n.s.	494.6 \pm 7.1	492.4 \pm 3.9	n.s.	n.s.	n.s.
Ti [ms]	45.0 \pm 0.7	40.9 \pm 0.5	< 0.01	42.0 \pm 0.6	39.9 \pm 0.7	n.s.	< 0.02	n.s.
Te [ms]	81.8 \pm 2.0	85.4 \pm 2.9	n.s.	79.4 \pm 1.8	82.0 \pm 0.8	n.s.	n.s.	n.s.
Ti/TT	0.35 \pm 0.01	0.32 \pm 0.01	< 0.01	0.35 \pm 0.01	0.33 \pm 0.00	n.s.	n.s.	n.s.
Tidal volume and flow rates at rest and activity								
Rest								
TV [ml]	0.26 \pm 0.02	0.21 \pm 0.00	< 0.01	0.26 \pm 0.02	0.20 \pm 0.01	< 0.05	n.s.	n.s.
PIF [ml/s]	8.1 \pm 0.5	7.5 \pm 0.3	n.s.	8.9 \pm 0.5	7.2 \pm 0.4	< 0.05	n.s.	n.s.
PEF [ml/s]	4.9 \pm 0.4	4.0 \pm 0.2	n.s.	5.1 \pm 0.3	3.8 \pm 0.2	< 0.01	n.s.	n.s.
MIF [ml/s]	4.9 \pm 0.3	4.5 \pm 0.1	n.s.	5.3 \pm 0.3	4.2 \pm 0.3	< 0.05	n.s.	n.s.
MEF [ml/s]	2.4 \pm 0.2	1.8 \pm 0.1	< 0.02	2.4 \pm 0.2	1.7 \pm 0.2	< 0.05	n.s.	n.s.

Activity								
TV [ml]	0.28 ± 0.01	0.22 ± 0.01	< 0.01	0.27 ± 0.01	0.21 ± 0.01	< 0.01	n.s.	n.s.
PIF [ml/s]	9.9 ± 0.5	8.6 ± 0.3	n.s.	10.5 ± 0.5	8.6 ± 0.4	< 0.01	n.s.	n.s.
PEF [ml/s]	6.8 ± 0.5	5.3 ± 0.3	< 0.02	6.9 ± 0.4	5.3 ± 0.2	< 0.01	n.s.	n.s.
MIF [ml/s]	6.1 ± 0.3	5.3 ± 0.2	< 0.05	6.4 ± 0.3	5.2 ± 0.2	< 0.01	n.s.	n.s.
MEF [ml/s]	3.4 ± 0.2	2.5 ± 0.1	< 0.01	3.4 ± 0.2	2.5 ± 0.1	< 0.01	n.s.	n.s.
Minute ventilation and body size/weight related parameters at rest and activity								
Rest								
sTV [μ l/g]	8.4 ± 0.5	8.6 ± 0.4	n.s.	7.5 ± 0.6	8.1 ± 0.6	n.s.	n.s.	n.s.
MV [ml/min]	93.4 ± 7.1	74.5 ± 3.2	n.s.	97.7 ± 7.7	71.6 ± 6.1	< 0.05	n.s.	n.s.
sMV [ml/min/g]	3.0 ± 0.3	3.1 ± 0.2	n.s.	2.8 ± 0.2	3.0 ± 0.3	n.s.	n.s.	n.s.
Activity								
sTV [μ l/g]	8.8 ± 0.6	8.8 ± 0.6	n.s.	7.7 ± 0.4	8.6 ± 0.5	n.s.	n.s.	n.s.
MV [ml/min]	130.0 ± 7.6	101.5 ± 5.0	< 0.02	130.8 ± 8.0	100.7 ± 5.1	< 0.01	n.s.	n.s.
sMV [ml/min/g]	4.1 ± 0.3	4.2 ± 0.4	n.s.	3.8 ± 0.2	4.2 ± 0.2	n.s.	n.s.	n.s.

Abbreviations

bw	body weight (g)
mean_f	mean of all respiratory rates (1/min)
f	respiratory rate (1/min)
TV	tidal volume (ml)
sTV	specific tidal volume (μ l/g)
MV	minute ventilation (ml/min)
sMV	specific ventilation (ml/min/g)
Ti	inspiratory time (ms)
Te	expiratory time (ms)
Ti/TT	relative duration of inspiration
PIF	peak inspiratory flow rate (ml/s)
PEF	peak expiratory flow rate (ml/s)
MIF	mean inspiratory flow rate (ml/s)
MEF	mean expiratory flow rate (ml/s)