

Supplementary table 1: A3R^{-/-} mice are characterized by decreased grip force and voluntary running speed.

Grip force	A3R ^{+/+} (n = 5)	A3R ^{-/-} (n = 5)
Body weight (g)	27.96 ± 0.28	26.9 ± 0.74
Maximal force (mN)	161.94 ± 7.13	122.79 ± 3.44**
Force normalized to body weight (nM/g)	5.8 ± 0.27	4.57 ± 0.07**
Voluntary running	A3R ^{+/+} (n = 4)	A3R ^{-/-} (n = 5)
Distance (m/day)	7805 ± 262.6	8002.8 ± 201.7
Average speed (m/min)	13.2 ± 0.5	11.6 ± 0.2*
Max speed (m/min)	24.9 ± 0.8	19.3 ± 0.4***
Forced running	A3R ^{+/+} (n = 5)	A3R ^{-/-} (n = 5)
Time (min)	15.55 ± 0.48	16.8 ± 1.0
Distance (m/day)	347.6 ± 13.6	386.5 ± 31.3

Mean values ± SD are shown, and statistical significance was determined by two-tailed Student's *t* test. *p < 0.05, ** p < 0,01, and *** p < 0.001.