

**SUPPLEMENTARY TABLE S1. Overview of hindlimb muscle weight, by sex and group, and P-Value for sex and group effects.**

Muscle Weight Wet/Body Weight ratio for SOL, EDL and Tibialis anterior muscles at P8, P15, P21 and P28.

Data are mean  $\pm$  S.E.M. Values were compared with a two-way ANOVA with Tukey post-hoc test.

<sup>#</sup>p<0.05, <sup>###</sup>p<0.001 vs. CTRL of the same sex.

		CTRL male	CTRL female	SMR male	SMR female	P value (sex effect)	P value (group effect)
SOL	P8	0.22 $\pm$ 0.01	0.19 $\pm$ 0.01	0.13 $\pm$ 0.01 <sup>###</sup>	0.17 $\pm$ 0.01	0,7095	<b>0,0001</b>
	P15	0.31 $\pm$ 0.02	0.31 $\pm$ 0.03	0.21 $\pm$ 0.02 <sup>#</sup>	0.21 $\pm$ 0.02 <sup>#</sup>	0,8772	<b>&lt;0,0001</b>
	P21	0.40 $\pm$ 0.02	0.43 $\pm$ 0.02	0.25 $\pm$ 0.02 <sup>###</sup>	0.27 $\pm$ 0.01 <sup>###</sup>	0,1716	<b>&lt;0,0001</b>
	P28	0.43 $\pm$ 0.02	0.46 $\pm$ 0.03	0.26 $\pm$ 0.01 <sup>###</sup>	0.28 $\pm$ 0.02 <sup>###</sup>	0,2336	<b>&lt;0,0001</b>
EDL	P8	0.27 $\pm$ 0.01	0.26 $\pm$ 0.01	0.27 $\pm$ 0.01	0.26 $\pm$ 0.01	0,2642	0,9807
	P15	0.33 $\pm$ 0.01	0.33 $\pm$ 0.02	0.35 $\pm$ 0.02	0.33 $\pm$ 0.02	0,6885	0,7463
	P21	0.45 $\pm$ 0.02	0.45 $\pm$ 0.01	0.33 $\pm$ 0.02 <sup>###</sup>	0.37 $\pm$ 0.01 <sup>###</sup>	0,1081	<b>&lt;0,0001</b>
	P28	0.49 $\pm$ 0.01	0.50 $\pm$ 0.01	0.47 $\pm$ 0.02	0.45 $\pm$ 0.01	0,7755	<b>0,0221</b>
TA	P8	0.90 $\pm$ 0.02	0.88 $\pm$ 0.02	0.94 $\pm$ 0.03	0.97 $\pm$ 0.04	0,8953	<b>0,0207</b>
	P15	1.21 $\pm$ 0.03	1.19 $\pm$ 0.04	1.19 $\pm$ 0.03	1.12 $\pm$ 0.05	0,6746	<b>0,0427</b>
	P21	1.50 $\pm$ 0.04	1.53 $\pm$ 0.02	1.31 $\pm$ 0.04	1.36 $\pm$ 0.12	0,4954	<b>&lt;0,0001</b>
	P28	1.82 $\pm$ 0.03	1.89 $\pm$ 0.04	1.62 $\pm$ 0.07 <sup>#</sup>	1.61 $\pm$ 0.03 <sup>###</sup>	0,7427	<b>&lt;0,0001</b>