

SUPPLEMENTAL MATERIAL

Supplemental Table 1 Top correlations (partial, adjusted for sex and parent of origin) between exercise / body composition traits and transcript levels. For a complete description of exercise and body composition traits see Refs. (23-25)

ProbeID	Gene Symbol	Exercise / Body Composition Trait	<i>n</i>	Partial <i>r</i>
<i>Running distance</i>				
ILMN_2614895	Nus1	Day 1	233	0.3333**
ILMN_2983587	Acot8	Day 2	233	0.3429**
ILMN_2983587	Acot8	Day 3	239	0.3415**
ILMN_2760295	AK206957	Day 4	216	0.3588**
ILMN_2760295	AK206957	Day 5	243	0.3919**
ILMN_2596522	Mt1	Day 6	243	0.4769**
ILMN_2596522	Mt1	(Days 5 + 6)/2	243	0.4513**
ILMN_1220686	Car14	Slope (days 1-6)	206	0.3270*
ILMN_2755443	Sh3kbp1	Intercept (days 1-6)	206	0.3601**
<i>Running time</i>				
ILMN_2730208	Mup2	Day 1	233	0.3720**
ILMN_2730208	Mup2	Day 2	233	0.3395*
ILMN_2709179	Eepd1	Day 3	239	-0.3707**
ILMN_2709179	Eepd1	Day 4	216	0.4159**
ILMN_2707834	Rpl13a	Day 5	243	0.3993**
ILMN_2707834	Rpl13a	(Days 5 + 6)/2	243	0.4426**
ILMN_2975377	Mtmr14	Slope (days 1-6)	206	-0.3396*
ILMN_1255013	Ilf3	Intercept (days 1-6)	206	-0.3422**
<i>Average running speed</i>				
ILMN_2596522	Mt1	Day 1	233	0.4003**
ILMN_1225602	S100a1	Day 2	233	0.4050**
ILMN_1225602	S100a1	Day 3	239	0.3787**
ILMN_2973824	Car14	Day 4	216	0.4097**
ILMN_1220686	Car14	Day 5	243	0.4429**
ILMN_1220686	Car14	Day 6	243	0.4086**
ILMN_2596522	Mt1	(Days 5 + 6)/2	243	0.4238**
ILMN_1228213	Ifi30	Slope (days 1-6)	206	0.3250*
ILMN_2755443	Sh3kbp1	Intercept (days 1-6)	206	0.3592**

<i>Maximum running speed</i>				
ILMN_2420353	AK082735	Day 1	233	0.3132*
ILMN_2420353	AK082735	Day 2	233	0.3180*
ILMN_2939303	Pcyt2	Day 3	239	0.3781**
ILMN_2420353	AK082735	Day 4	216	0.4130**
ILMN_1220686	Car14	Day 5	243	0.4295**
ILMN_1220686	Car14	Day 6	243	0.4219**
ILMN_2707834	Rpl13a	(Days 5 + 6)/2	243	0.4353**
ILMN_2628567	Phlda3	Slope (days 1-6)	206	0.3737**
ILMN_1255013	Ilf3	Intercept (days 1-6)	206	0.3127*
<i>Food consumption</i>				
ILMN_1219703	Myg1	Food intake	242	-0.3059**
ILMN_1219703	Myg1	Food intake / g	241	0.3557**
<i>~4 wk of age</i>				
ILMN_1223819	Stk25	Body mass, g	242	-0.2909*
ILMN_2484987	Man2b1	% Fat	242	-0.3302*
ILMN_2484987	Man2b1	% Lean	242	0.3279*
<i>~6 wk of age</i>				
ILMN_1223819	Stk25	Body mass, g	241	-0.3105*
ILMN_2484987	Man2b1	% Fat	241	-0.3590**
ILMN_2484987	Man2b1	% Lean	241	0.2760*
<i>~8 wk of age / Pre exercise</i>				
ILMN_2650392	Rbm28	Body mass, g	242	-0.3197*
ILMN_2695964	Lep	% Fat	242	-0.4002**
ILMN_2767216	Actc1	% Lean	242	0.3582**
<i>Post exercise</i>				
ILMN_2738893	Ermp1	Body mass, g	242	0.3399*
ILMN_2730208	Mup2	% Fat	242	-0.4430**
ILMN_2695964	Lep	% Lean	242	-0.4402**
ILMN_2695964	Lep	% Change in body mass	242	-0.3122*
ILMN_3065459	Mup2	% Change in % fat	242	0.3000*
ILMN_3065459	Mup2	% Change in % lean	242	0.3462*

* P < 0.05, **P < 0.001