

1 **Supplementary Table 4.** Interaction of neonate's sex in differential placental protein
 2 expression between birth weight groups.

Protein	Variable	DF	F	<i>p</i>	Interaction	Mean*	SEM	<i>p</i> [†]
AMPK	BW group	2	1.822	0.175	SGA-Females	1.260	0.11	0.008
					SGA-Males	0.797	0.12	
	Neonate sex	1	2.709	0.108	AGA-Females	0.864	0.12	0.470
					AGA-Males	0.979	0.10	
	BW group x sex	2	3.208	0.051	LGA-Females	0.852	0.20	0.420
LGA-Males					0.661	0.13		
p-AMPK	BW group	2	53.942	<0.001	SGA-Females	0.962	0.06	0.001
					SGA-Males	0.676	0.06	
	Neonate sex	1	2.26	0.141	AGA-Females	0.376	0.06	0.598
					AGA-Males	0.418	0.05	
	BW group x sex	2	4.589	0.016	LGA-Females	0.133	0.10	0.996
LGA-Males					0.133	0.06		
LKB1	BW group	2	3.689	0.034	SGA-Females	1.070	0.11	0.027
					SGA-Males	0.705	0.12	
	Neonate sex	1	0.18	0.673	AGA-Females	0.675	0.12	0.786
					AGA-Males	0.716	0.10	
	BW group x sex	2	2.651	0.083	LGA-Females	0.432	0.19	0.404
LGA-Males					0.622	0.12		
p-LKB1	BW group	2	52.805	<0.001	SGA-Females	0.924	0.06	0.005
					SGA-Males	0.659	0.07	
	Neonate sex	1	0.898	0.349	AGA-Females	0.245	0.07	0.663
					AGA-Males	0.283	0.06	
	BW group x sex	2	3.615	0.036	LGA-Females	0.071	0.11	0.655
LGA-Males					0.129	0.07		
SIRT1	BW group	2	0.968	0.389	SGA-Females	0.406	0.14	0.903
					SGA-Males	0.380	0.15	
	Neonate sex	1	1.468	0.233	AGA-Females	0.543	0.15	0.087
					AGA-Males	0.191	0.13	
	BW group x sex	2	0.656	0.524	LGA-Females	0.214	0.25	0.675
LGA-Males					0.088	0.16		
PGC1a	BW group	2	10.244	<0.001	SGA-Females	0.963	0.12	0.246
					SGA-Males	1.161	0.12	
	Neonate sex	1	1.109	0.299	AGA-Females	0.597	0.12	0.296
					AGA-Males	0.768	0.11	
	BW group x sex	2	0.293	0.748	LGA-Females	0.454	0.20	0.943
LGA-Males					0.436	0.13		
mTOR	BW group	2	3.328	0.047	SGA-Females	0.757	0.12	0.794
					SGA-Males	0.802	0.12	
	Neonate sex	1	0.474	0.495	AGA-Females	1.047	0.11	0.647
					AGA-Males	0.978	0.10	
	BW group x sex	2	0.372	0.692	LGA-Females	1.212	0.19	0.390
LGA-Males					1.014	0.13		
p-mTOR	BW group	2	7.719	0.002	SGA-Females	0.555	0.12	0.467
					SGA-Males	0.678	0.12	
	Neonate sex	1	0.645	0.427	AGA-Females	1.034	0.11	0.948
					AGA-Males	1.024	0.09	

BW group x sex	2	1.573	0.221	LGA-Females	1.188	0.18	0.108
				LGA-Males	0.823	0.13	

3 Two-way ANOVA analyzing differences between BW (birth weight) groups (SGA, AGA,
4 LGA), neonatal sex (Male, Female) and their statistical interaction. SEM (Standar Error of
5 the Mean). *Least square means for interaction. +p value for Fisher LSD multiple
6 comparison. Bold values indicate statistical significance.

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