

Supplementary Materials

Maternal and Intrauterine Influences on Feto-Placental Growth Are Accompanied by Sexually Dimorphic Changes in Placental Mitochondrial Respiration, and Metabolic Signalling Pathways

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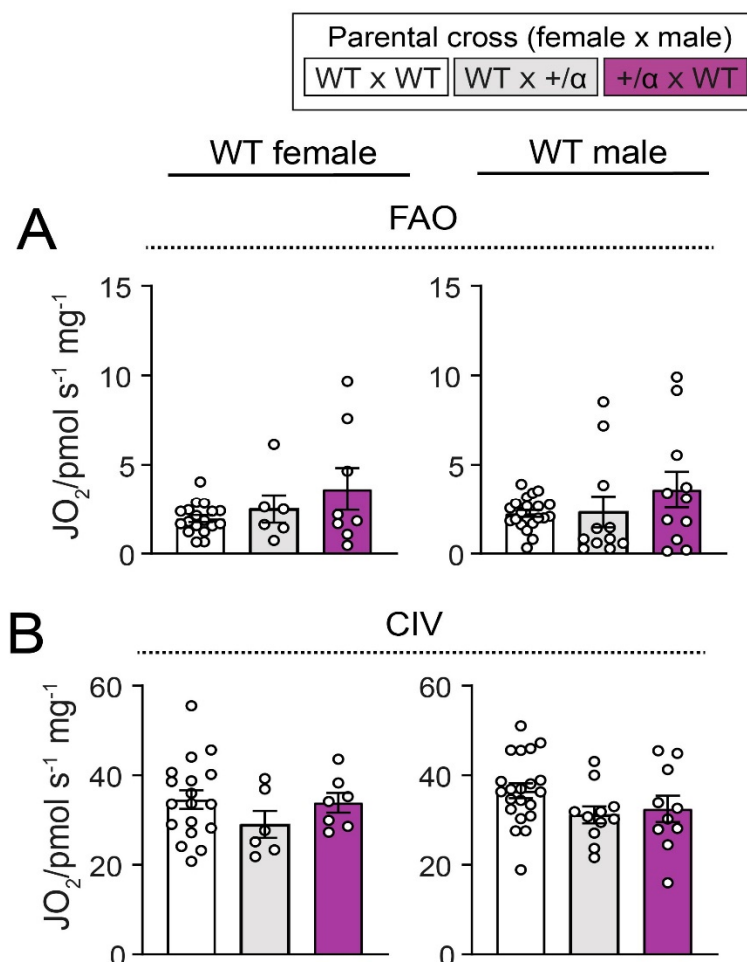


Figure S1. Placental mitochondrial bioenergetics of WT conceptuses in response to littermate and/or maternal p110α deficiency. Oxygen consumption linked to mitochondrial fatty acid oxidation (**A**) and CIV (**B**) in the placental LZ of females and males on day 18 of pregnancy. Data are from WT fetuses generated by WT x WT, WT x α/+ and α/+ x WT parental crosses ($n = 1-2$ fetuses/sex/dam

with 5–12 dams/group) and are displayed as individual data points with mean \pm S.E.M. Data were analyzed by one-way ANOVA with Tukey *post hoc* pairwise comparisons.

Table S1. List of primary antibodies used in this study.

Primary Antibody	Host/ Isotype	Manufacturer, Catalogue Number	Dilution
AKT	Rabbit	Cell Signalling, 9272	1/1000
Phospho-AKT (Ser473)	Rabbit	Cell Signalling, 9271	1/1000
Phospho-AMPK (Thr172)	Rabbit	Cell Signalling, 2535	1/1000
P44/42 MAPK (Erk1/2)	Rabbit,	Cell Signalling, 4695	1/1000
Phospho-MAPK-p44/42 (Erk1/2; Thr202/Tyr204)	Rabbit IgG	Cell Signalling, 4370	1/1000
Total-p38 MAPK	Rabbit IgG	Cell Signalling, 8690	1/1000
Phospho-p38 MAPK (Thr180/Tyr182)	Rabbit IgG	Cell Signalling, 4511	1/1000
UCP2	Rabbit IgG	Biologend, 615902	1/500
PGC-1 α	Rabbit	Santa Cruz, sc-13067	1/1000
OXPHOS	Mouse IgG	Thermo Fisher, 45-8099	1/250
Citrate synthase	Rabbit	Abcam, ab9660	1/1000
PPAR- γ	Mouse IgG	Santa Cruz, sc-7273	1/200

Table S2. Litter size and composition.

	WT x WT	WT x $\alpha/+$	$\alpha/+$ x WT	<i>p</i> Value
Litter size	7.92 \pm 0.36	7.40 \pm 0.93	7.46 \pm 0.49	0.7251
% Females in the litter	48.28 \pm 3.46	44.33 \pm 6.30	59.44 \pm 6.25	0.1474
% Mutants in the litter	-	41.43 \pm 11.01	61.33 \pm 6.30	0.1933
% Mutant females in the litter	-	32.02 \pm 10.36	35.12 \pm 7.29	0.1234