

Phosphoinositide 3-Kinase (PI3K) Subunit p110 δ Is Essential for Trophoblast Cell Differentiation and Placental Development in Mouse

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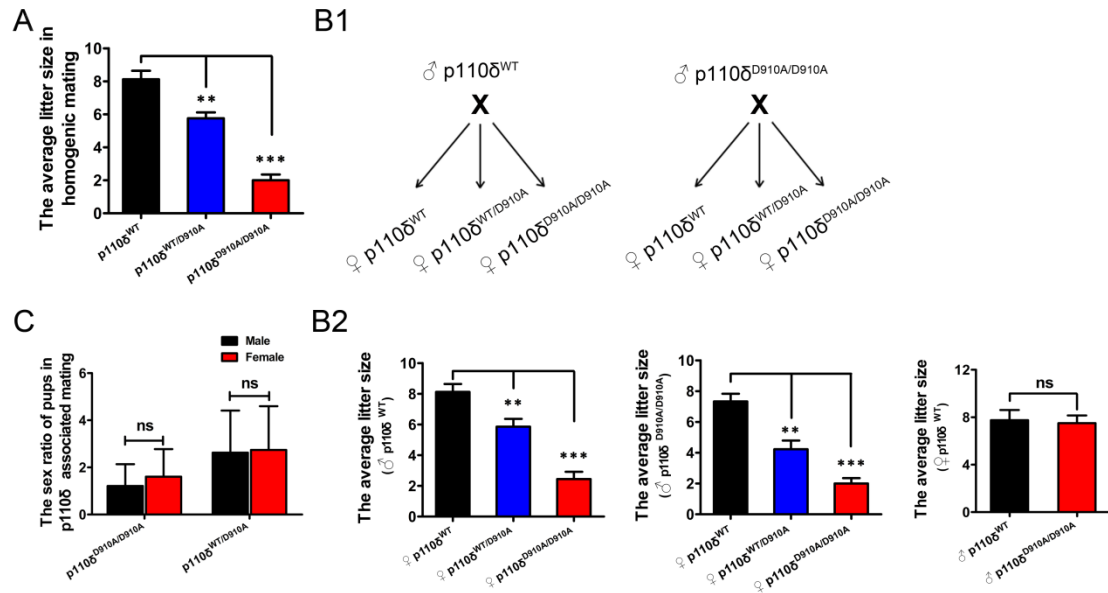
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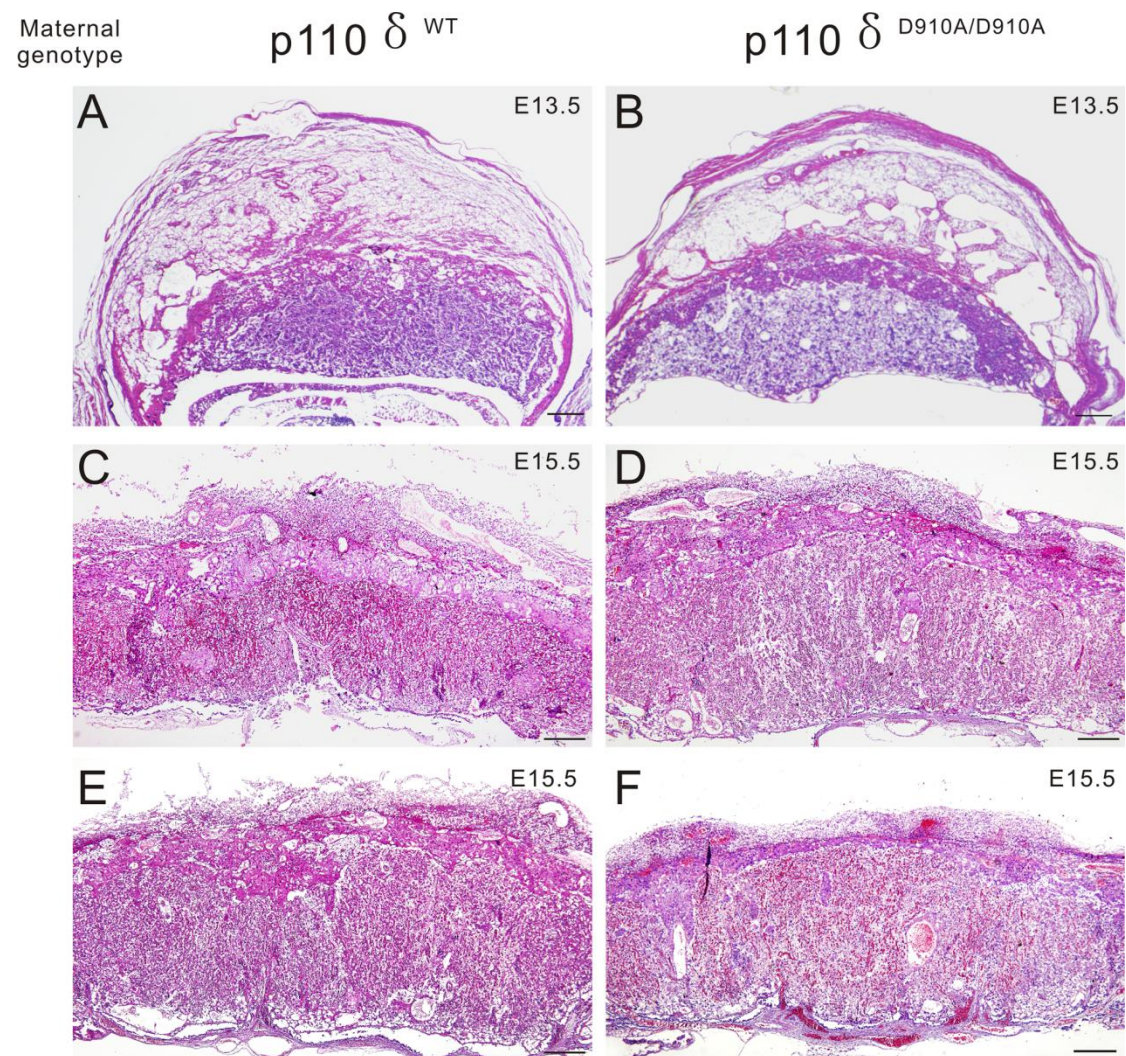
Supplementary Figure S1



The statistical analyses of mice mating.

A. The statistical results of average litter size in three different homogenic mice mating. **B1-B2.** The detailed genotyping breeding studies in inactive p110δ mice. **C.** The sex ratio of pups in inactive p110δ mice mating.

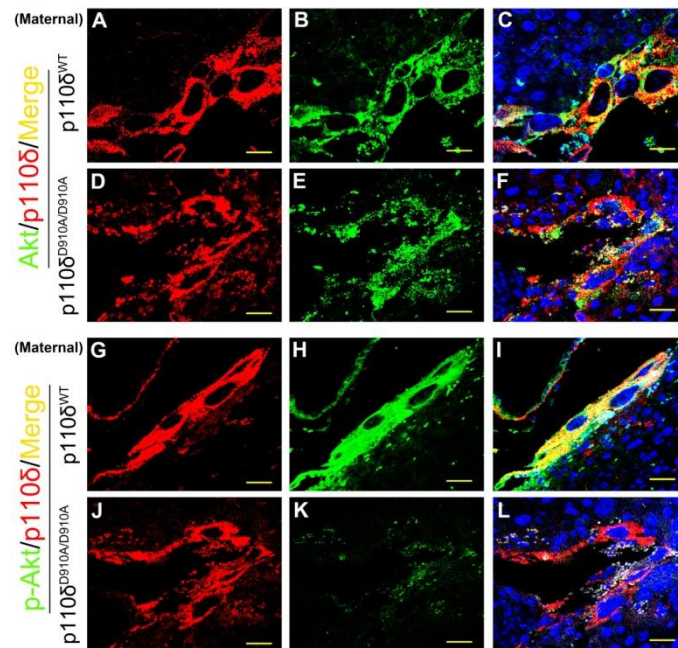
Supplementary Figure S2



The additional histological observation of the placenta.

The H&E staining of placenta cross-sections at E13.5 (A-B) and at E15.5 (C-F) from $p110\delta^{WT}$ and $p110\delta^{D910A/D910A}$ female mice, respectively. Scale bars: 500 μ m

Supplementary Figure S3



The activation of the PI3K/Akt signal in P-TGCs.

A-F. Dual immunofluorescent test against Akt and p110 δ at E8.5 P-TGCs from p110 δ ^{WT} and p110 δ ^{D910A/D910A} female mice. **G-L.** Dual immunofluorescent test against p-Akt and p110 δ at E8.5 P-TGCs from p110 δ ^{WT} and p110 δ ^{D910A/D910A} female mice.

Scale bars: 25 μ m

Supplementary Figure S4

Name	Primer Sequences	
	F (5'-3')	R (5'-3')
Hand1	CATCGCCTACTTGATGGACGTG	CCCTTTAATCCTCTCTCGCCG
Mash2	GTGCAAACGTCCACTTCCCACC	TGCTTTCCTCCGACGAGTAGGC
HIF-1 α	GTCGGACAGCCTACCAAACAGAGC	GTTAACCTGATCCAAAGCTCTGAG
Gcm 1	GATACTGAGCTGGGACATTAACG	CTGTCGTCCGAGCTGTAGATG
PLF	AGCCCATGAGATGCAATACT	CGGACTGCGTTGATCTTTTTCTT
PL1	CCACTGAAGACCTGTATACTC	GGACTGCAGTCTTCGAGTC
PL2	CACCAGACAACATCGGAAGAC	TGACAGCAGAGTATCAGGTACA
FGFR2	AGCGCCTGTGAGAGAGAAG	CCGAAACTGTTACCTGTCTCC
LIFR	AGCTCTGACCCTCCTGCAT	TGGGTGACAAGAATGGAACCT
SOCS3	TCACACTGAGCGTCGAGA	GTGGAGCATCATACTGGT
CCN1	CTCCAGAATCTACCAAACGGG	CGTCCAGGGAGTCCTTAATGC
VEGFR1	CTCAGGGTCGAAGTAAAAGTGC	TTGCCTGTTATCCCTCCCACA
VEGF	ATGACTTTCTGCTGTCTTGGGTG	CACCGCCTCGGCTTGCACA
MMP12	TGAAGCGTGAGGATGTAGACT	TCAAGGATGGGGGTTTCACT
GATA3	GGAGGACTTCCCCAAGAGCA	CATGCTGGAAGGGTGGTGAG
GAPDH	TCCACCACCTGTTGCTGTA	TCCACCACCTGTTGCTGTA

The list of detail primer sequences used in RT-PCR experiment.