

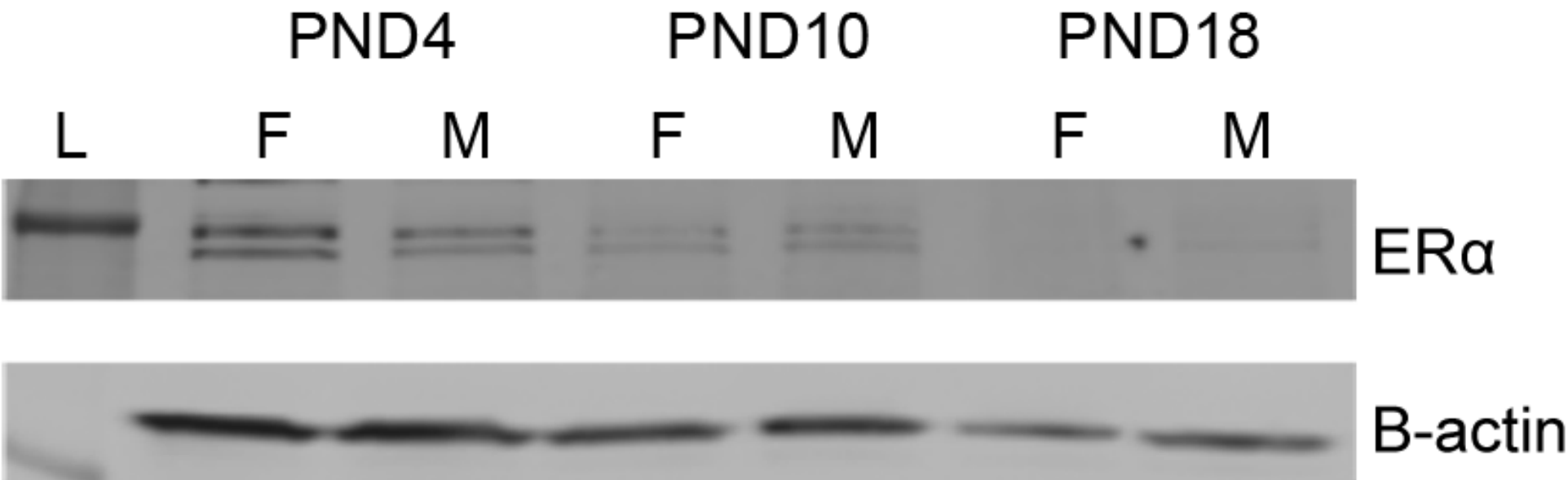
582 **Supplemental Figure 1.** Western blots with ER α antibody demonstrated that ER α protein expression
583 was high at PND 4 in both female and male mouse cortex. ER α protein expression was lower at PND 10
584 and virtually absent by PND 18 in both male and female mouse cortex.

585

586 **Supplemental Figure 2.** To determine if gender influenced the association of MeCP2 with ER α
587 promoters, we conducted a ChIP assay. Cortical tissue was taken from female and male mouse pups at
588 PND 4, 10 and 18. Nuclear proteins were then cross-linked and sheared chromatin was
589 immunoprecipitated (IP) with MeCP2 antibody. Recovered chromatin was amplified by standard PCR
590 using primers spanning regions of Exon A. Non-immune IgG was used in all ChIP reactions as a control.
591 An ethidium bromide-stained gel of PCR products showed a representative of ChIP analysis. In= Input,
592 Ip= immunoprecipitated with MeCP2 antibody, NI=non-immune IgG antibody.

593

Supplemental Figure 1



Supplemental Figure 2

Exon A

PND4

PND10

PND18

L

In

Ip

NI

In

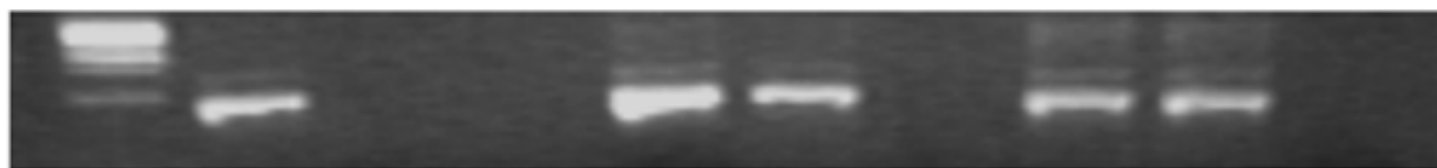
Ip

NI

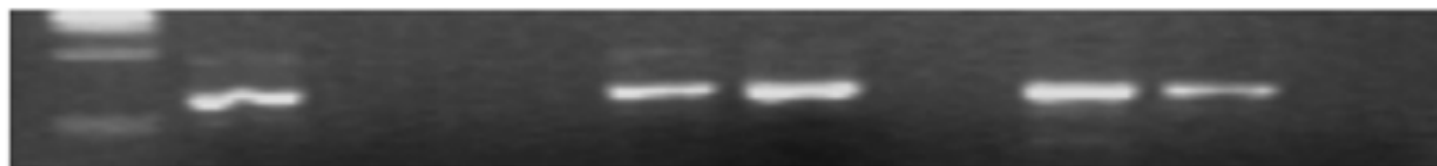
In

Ip

NI



Female



Male