



Supplemental Figure 1. CMV-Cre is X-linked and express Cre recombinase in early stages of mouse embryogenesis but X-chromosome inactivation is not cause of phenotypic variability shown in Cre;myr-*p110a* embryos. PCR products were generated from purified genomic DNA of the yolk sacs dissected from embryos. Cre;myr-*p110a* (lanes 1 to 6) or Cre;WT (lanes 7 to 12) embryos harvested from CMV-Cre homozygous mother and myr-*p110a*^{wt/fl} father crosses were either female or male, whereas Cre;myr-*p110a* embryos harvested from myr-*p110a*^{wt/fl} mother and hemizygous CMV-Cre father crosses were all females (lanes 13 to 18). From myr-*p110a*^{wt/fl} mother and hemizygous CMV-Cre father crosses, all Cre harboring embryos were females (lanes 13 to 18 and 25 to 27) and embryos not harboring Cre gene were all males (lanes 19 to 24 and 28 to 30). Embryos were randomly chosen at the embryonic days of 10.5 to E12.5. The PCR products were visualized in a 1.5% agarose gel electrophoresis. Representative results of genomic PCR detecting 441 bp of male-specific gene SRY and 245 bp of the autosomal gene myogenin (Myog) found in both males and females.