

Figure S1. Analysis of potential MeCP2 truncated proteins following the co-treatment of Gentamicin and CDX5-1. **(A).** Western blot analysis of R168X, **(B).** R255X, **(C).** R270X, and **(D).** R290X transfected HeLa cells treated with 800 µg/mL gentamicin and the indicated concentrations of CDX5-1 for 24hr, and probed with the Anti-FLAG antibody. Note that MeCP2-R168X, -R255X, -R270X and -R294X are the truncated FLAG-MeCP2 isoforms.

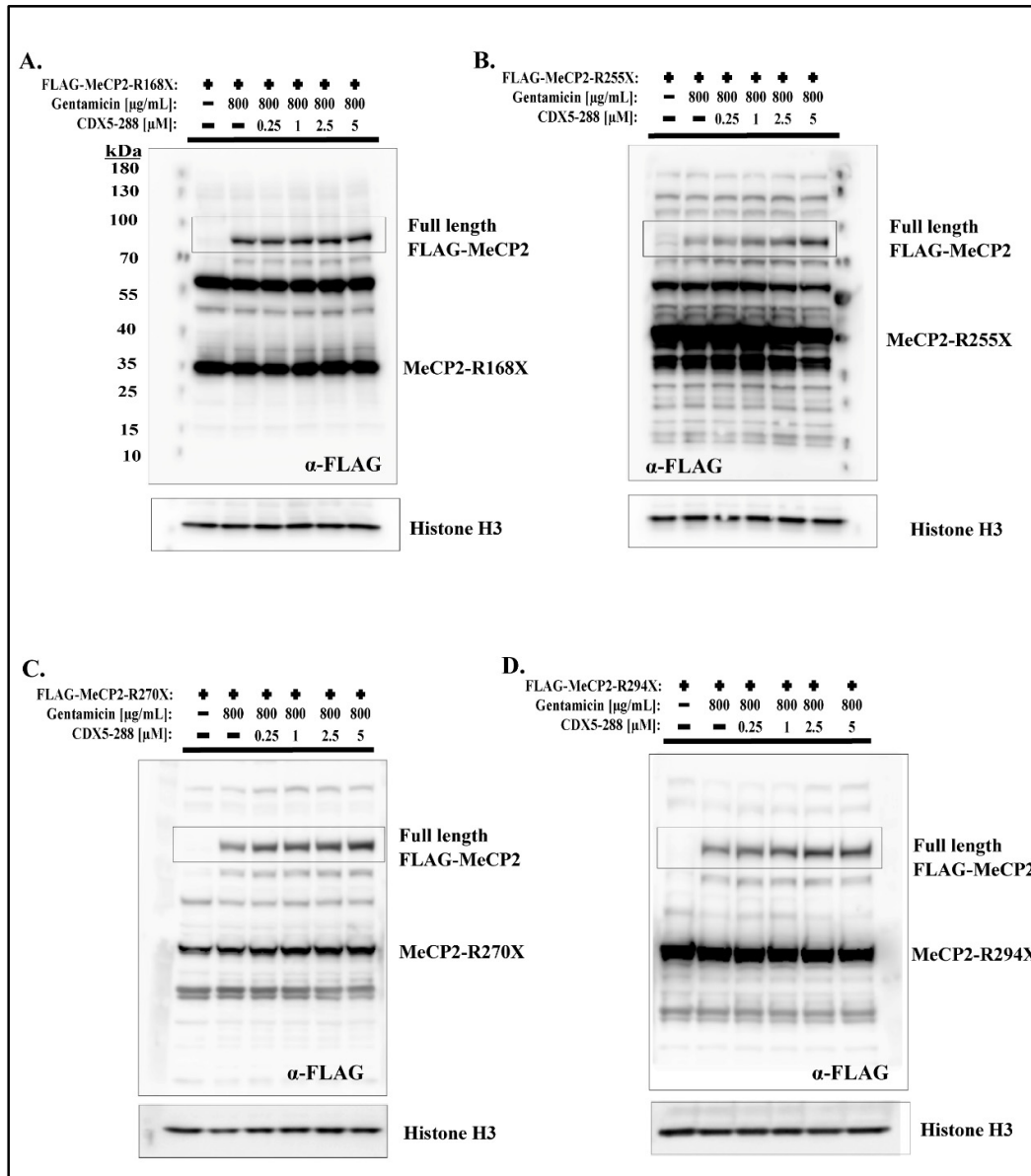


Figure S2. Analysis of potential MeCP2 truncated proteins following the co-treatment of Gentamicin and CDX5-288. **(A).** Western blot analysis of R168X, **(B).** R255X, **(C).** R270X, and **(D).** R290X transfected HeLa cells treated with 800 $\mu\text{g/mL}$ gentamicin and the indicated concentrations of CDX5-288 for 24hr, and probed with the Anti-FLAG antibody. Note that MeCP2-R168X, -R255X, -R270X and -R294X are the truncated FLAG-MeCP2 isoforms.

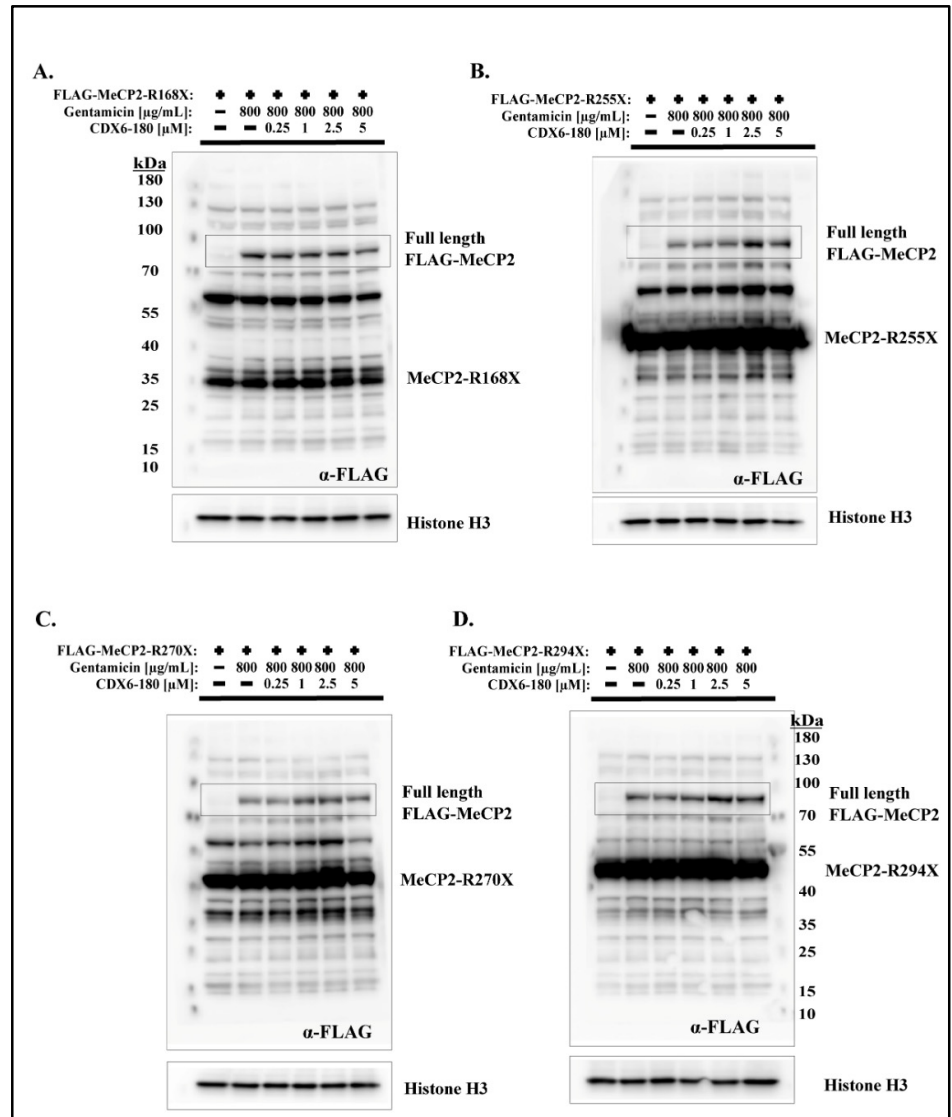


Figure S3. Analysis of potential MeCP2 truncated proteins following the co-treatment of Gentamicin and CDX6-180. (A). Western blot analysis of R168X, (B). R255X, (C). R270X, and (D). R290X transfected HeLa cells treated with 800 μ g/mL gentamicin and the indicated concentrations of CDX6-180 for 24hr, and probed with the Anti-FLAG antibody. Note that MeCP2-R168X, -R255X, -R270X and -R294X are the truncated FLAG-MeCP2 isoforms.

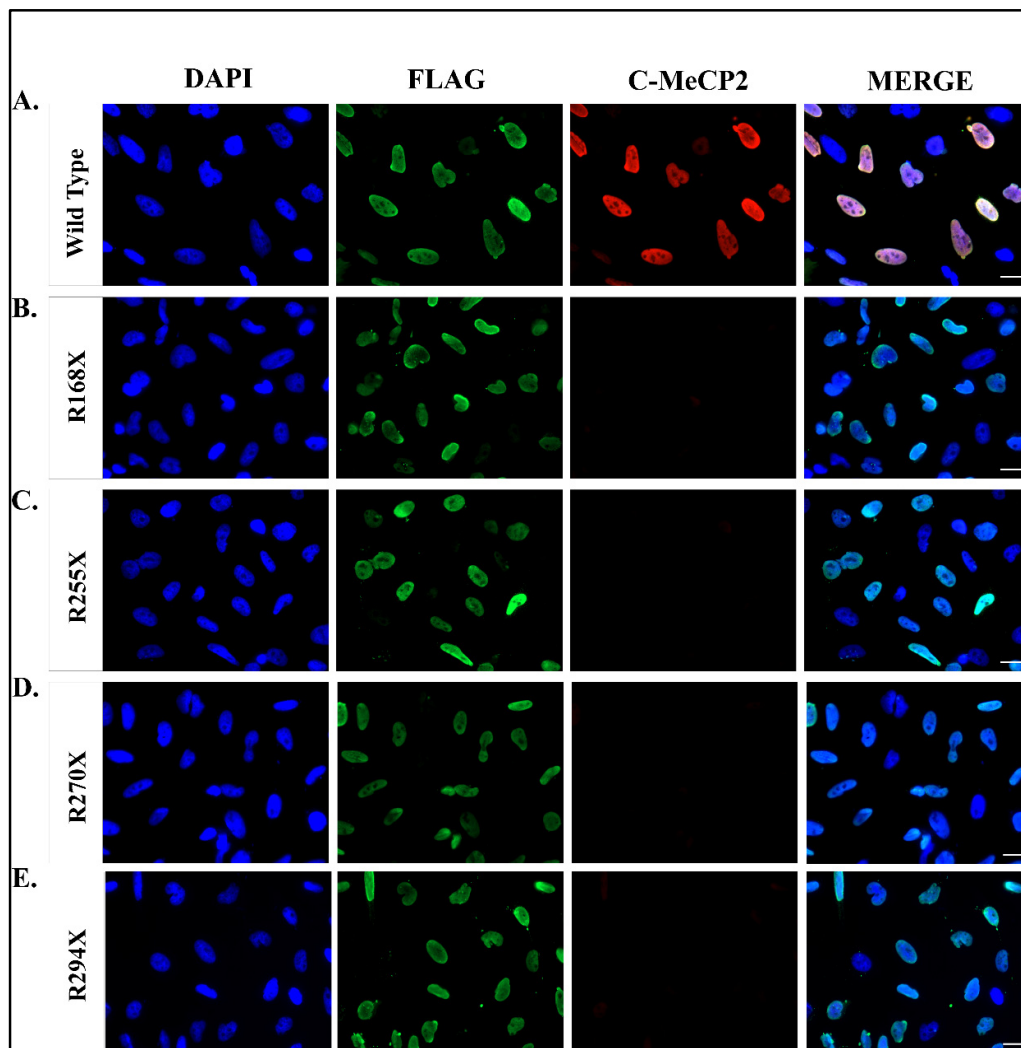


Figure S4. No signal corresponding to C-MeCP2 was detected in untreated cells expressing mutated MeCP2 isoforms. **(A).** Immunofluorescence studies of wild type-MeCP2, **(B).** R168X, **(C).** R255X, **(D).** R270X, and **(E).** R290X transfected HeLa cells without any treatment. Scale bars: 20 μ m.