

Figure S1. PrPC^{WD} protease resistance in heterozygous deer expressing wt-PrPC. No significant differences were observed despite smaller levels of total PrPC^{WD} compared to wt/wt deer (Two-way ANOVA $p < 0.05$; Tukeys multiple comparison post-test). Mean relative intensity and standard deviation indicated by bars. Densitometry was performed in three protease digestion experiments per CWD lineage.

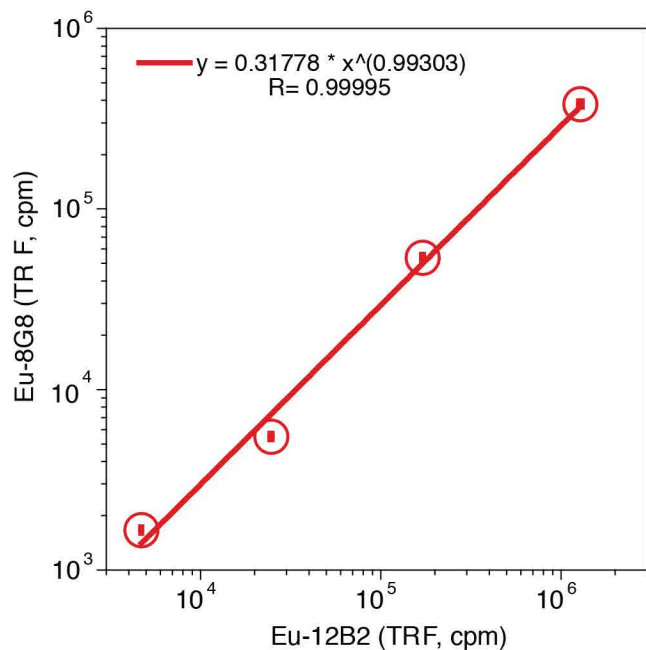
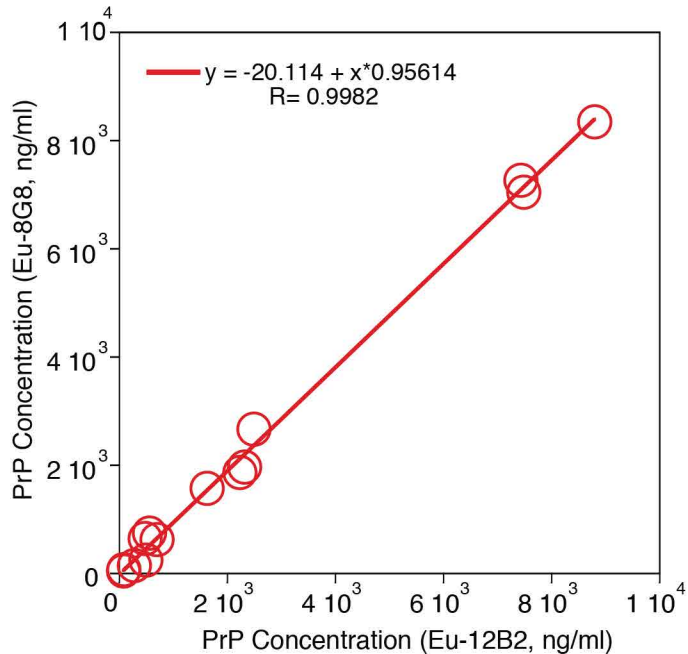
A**B**

Figure S2. A) Calibration of CDI with Eu-12B2 and Eu-8G8 (epitope SQWNKP deer residues 100-105) with full recombinant PrP(23-231). B) Equivalent wt-PrP detection sensitivity with Europium-8G8 and Eu-12B2 in deer brain.

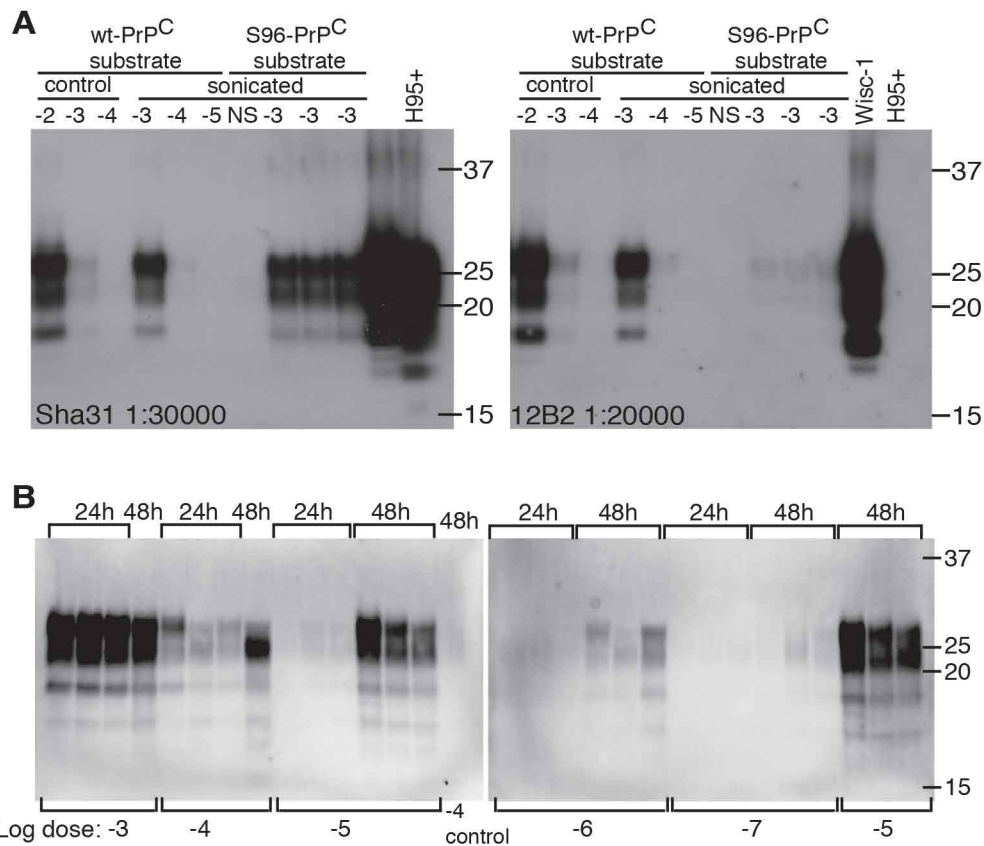


Figure S3. *In vitro* amplification of CWD lineages from deer and tg60 mice. **A**) PMCA propagation Wisc-1 from wt/wt deer with S96-PrP^C (mAbs indicated). **B**) PMCA detection of wt/wt prions on wt-PrP^C substrate after a single 48 hour round (Sha31 mAb 1:30000) - developed using gel imager. Unless otherwise specified, a single 24h round of PMCA was performed (30 seconds sonication at 60% amplitude every 15 minutes at 37°C). No sonication (control). No seed (NS).