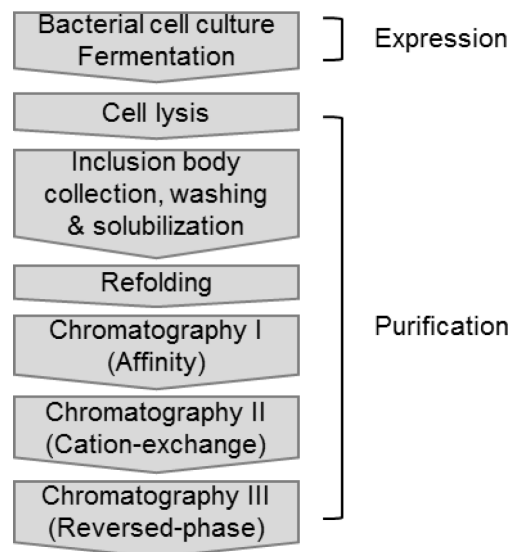
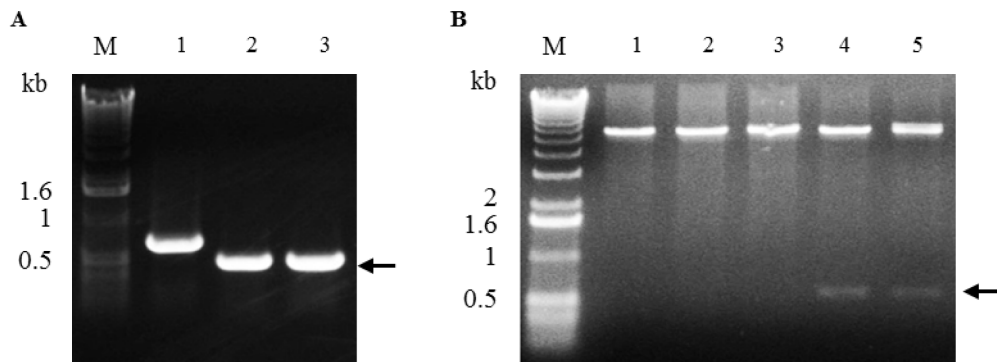


**Fig. S1.** Diagram of hPrP(90-230) and mPrP(89-231).

The recombinant proteins included secondary structural motifs (two short  $\alpha$  sheets and three  $\beta$  helices) in the C-terminal region of PrP. NTS, N-terminal signal sequence for plasma membrane targeting; OR, octarepeat to which copper ions bind; CTS, C-terminal signal sequence for GPI anchor modification.

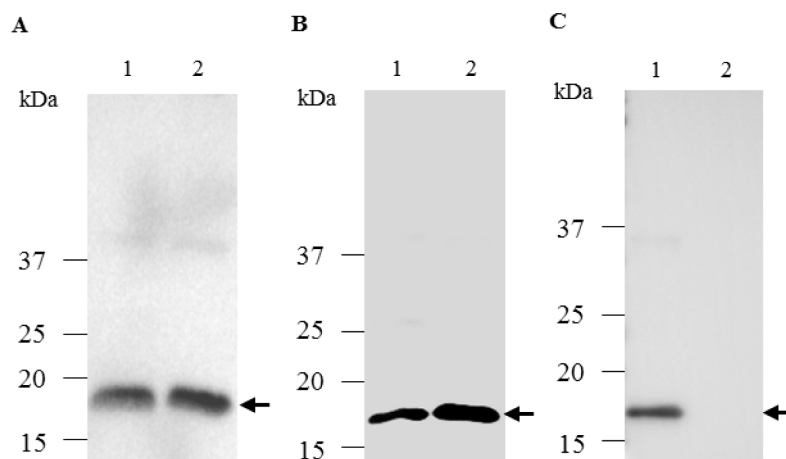


**Fig. S2.** Expression and purification scheme to produce highly pure recPrP on a large scale.



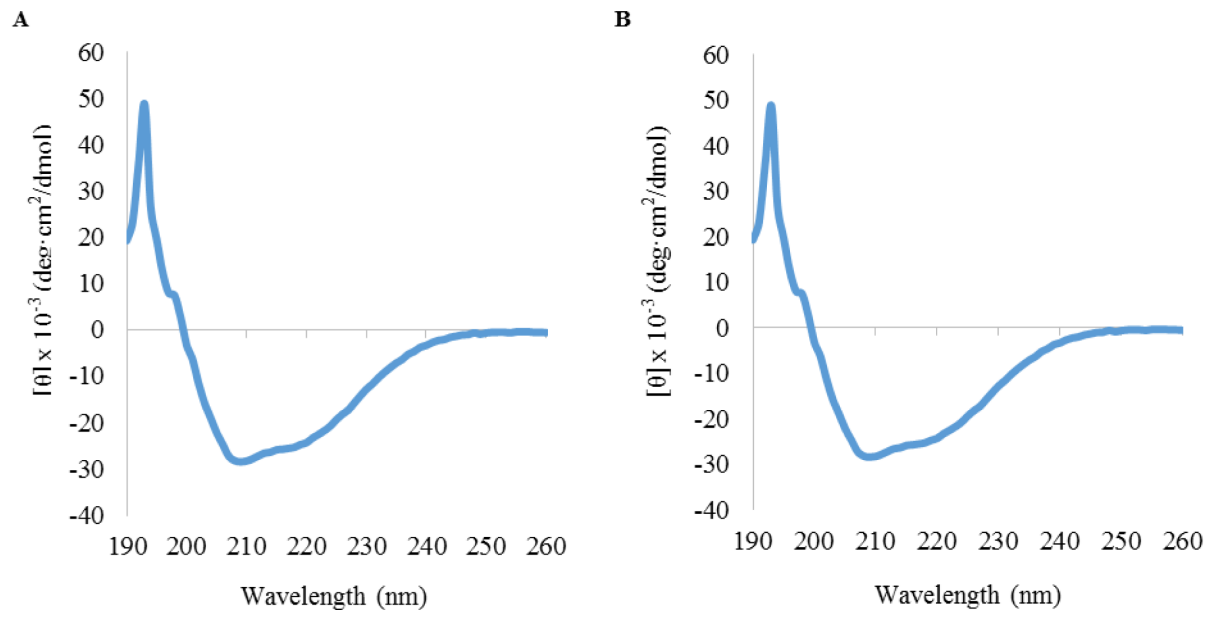
**Fig. S3.** DNA fragments encoding PrP gene of the C-terminal globular region.

**A.** PCR products for the full length PrP gene control (Lane 1), hPrP(90-230) gene (Lane 2), and mPrP(89-231) gene (Lane 3). **B.** Confirmation of DNA cloning by Nhe I and Sac I restriction enzyme digestion of recombinant plasmids isolated by mini-prep. Lane 1: negative control. Lane 2-3: vector with no insert DNA fragments of His-tag fusion PrP. Lane 4: PCR product for (His)<sub>6</sub>-hPrP(90-230). Lane 5: PCR product for (His)<sub>6</sub>-mPrP(89-231).



**Fig. S4.** Western blots of (His)<sub>6</sub>-hPrP(90-230) (Lanes 1) and (His)<sub>6</sub>-mPrP(89-231) (Lanes 2).

RecPrPs were detected by anti-(His)<sub>6</sub> (A), anti-PrP 6D11 (B), and anti-PrP 3F4 (C) antibodies. The 3F4 epitope is missing in the mPrP amino acid sequence



**Fig. S5.** CD spectra of recombinant (His)<sub>6</sub>-hPrP(90-230) (A) and (His)<sub>6</sub>-mPrP(89-231) (B).