Supporting Information
Manuscript Title: Interaction between Prion Protein and Aβ Amyloid Fibrils Revisited
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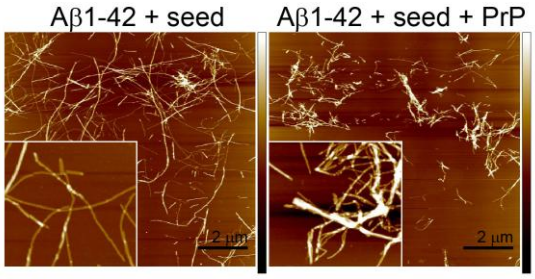
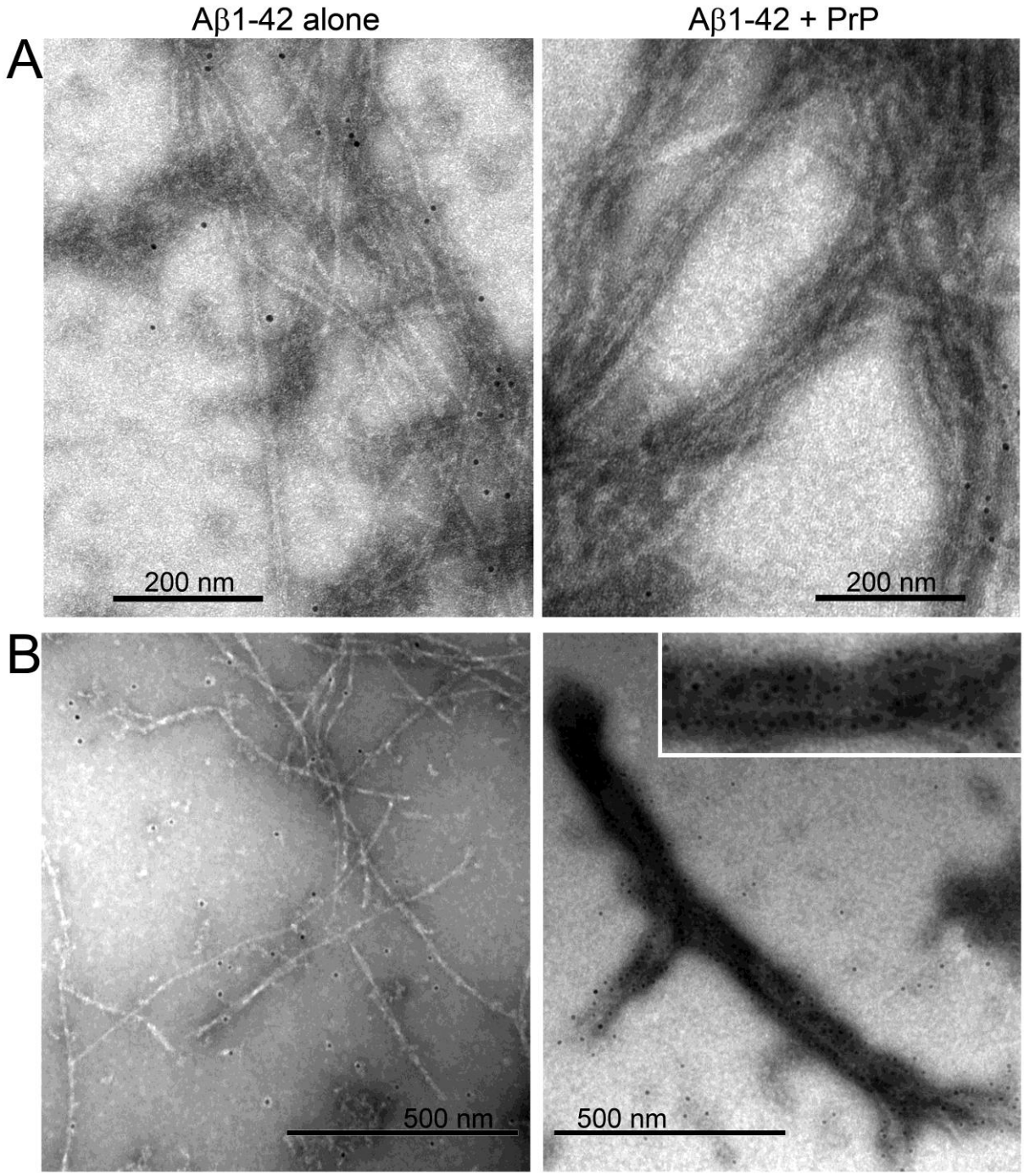
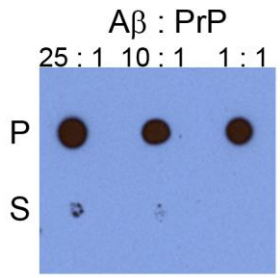


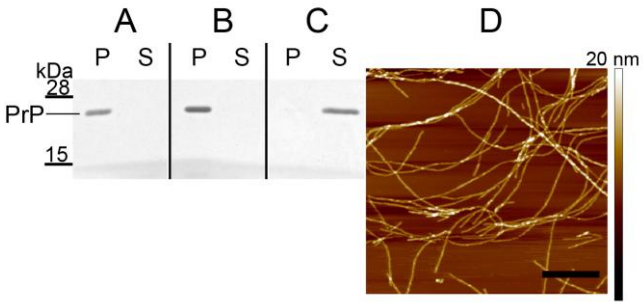
Supplemental Figure S1. AFM images of Aβ1-42 fibrils generated in the presence or absence of PrP in the reaction seeded with preformed Aβ1-42 fibrils. The samples were incubated for 24 h at the conditions described for experiments presented in Fig. 1. The final concentration of monomeric Aβ1-42, PrP and Aβ1-42 seeds was 10, 0.5 and 1 μM, respectively. Fibrils used as seeds were presonicated. Insets show images at 5-fold higher magnification. The color coded bars illustrate the height scale in the range between 0 nm (darkest color) and 20 nm (white color).



Supplemental Figure S2. Interaction between PrP and mature Aβ1-42 fibrils as evidenced by TEM. (A) Micrographs showing fibril bundling upon addition of PrP. Particles of colloidal gold (without primary antibodies) were added to document identical magnification of micrographs in the absence and presence of PrP. (B) Immuno-gold labeling of antibodies against His-tagged PrP reveal decoration of Aβ1-42 fibrils with PrP along the entire fibril length. Inset shows a magnified fragment of the image of decorated fibrils.



Supplemental Figure S3. Sedimentation of fibrillar Aβ1-42 in the presence of PrP. Aβ1-42 fibrils (20 μM) were incubated with increasing concentrations of PrP (Aβ : PrP molar ratios as indicated) and centrifuged under the conditions described for experiments presented in Figures 2 and 4. The pellets (resuspended in the initial volume of the sample) and supernatants were spotted onto nitrocellulose and analyzed with 1,000-fold diluted mouse mAb BAM-10 against Aβ (Sigma) and subsequently with 5,000-fold diluted HRP-conjugated goat Ab against mouse IgG. Symbols P and S refer to pellet and supernatant, respectively.



Supplemental Figure S4. Cosedimentation of PrP with Aβ1-40 fibrils. PrP (2 μM) was incubated in the absence or presence of intact Aβ1-40 fibrils or fibrils fragmented by sonication (50 μM in each case). The samples were subsequently centrifuged under the conditions allowing sedimentation of Aβ fibrils, and the pellets and supernatants were analyzed by SDS-PAGE. (A) PrP preincubated with intact Aβ1-40 fibrils; (B) PrP preincubated with fragmented Aβ1-40 fibrils; (C) PrP alone. Symbols P and S refer to pellet and supernatant, respectively. (D) AFM image of intact Aβ1-40 fibrils. The scale bar represents 0.8 μm.