

## **Supplementary Figures**

### **Clearance of amyloid plaque via focused ultrasonication in a mouse model of Alzheimer's disease**

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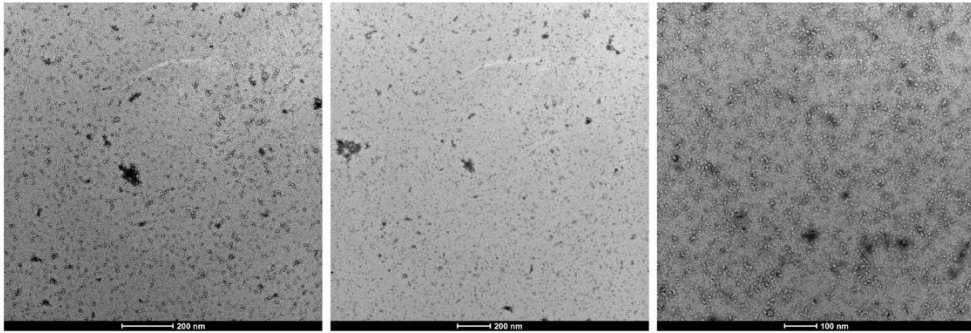
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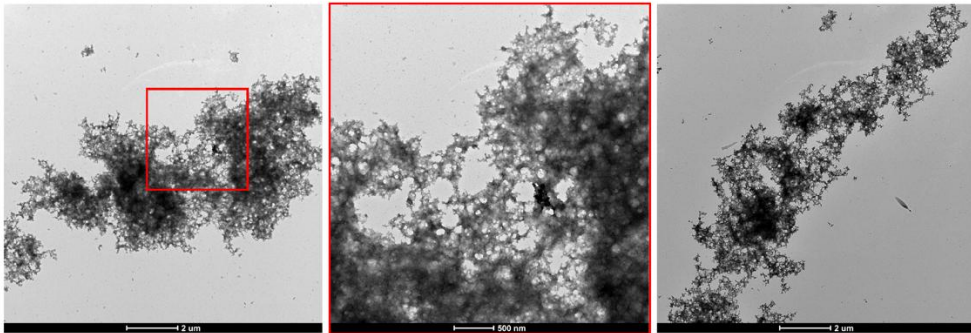
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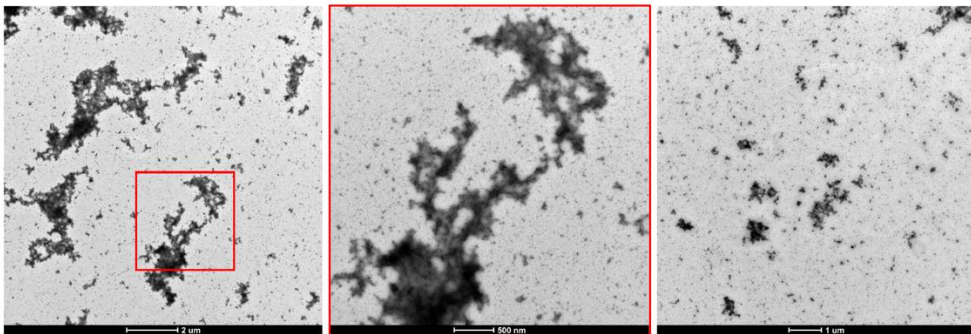
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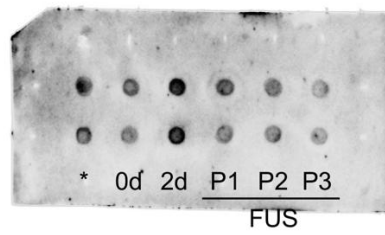
**B 2d**



**C FUS**

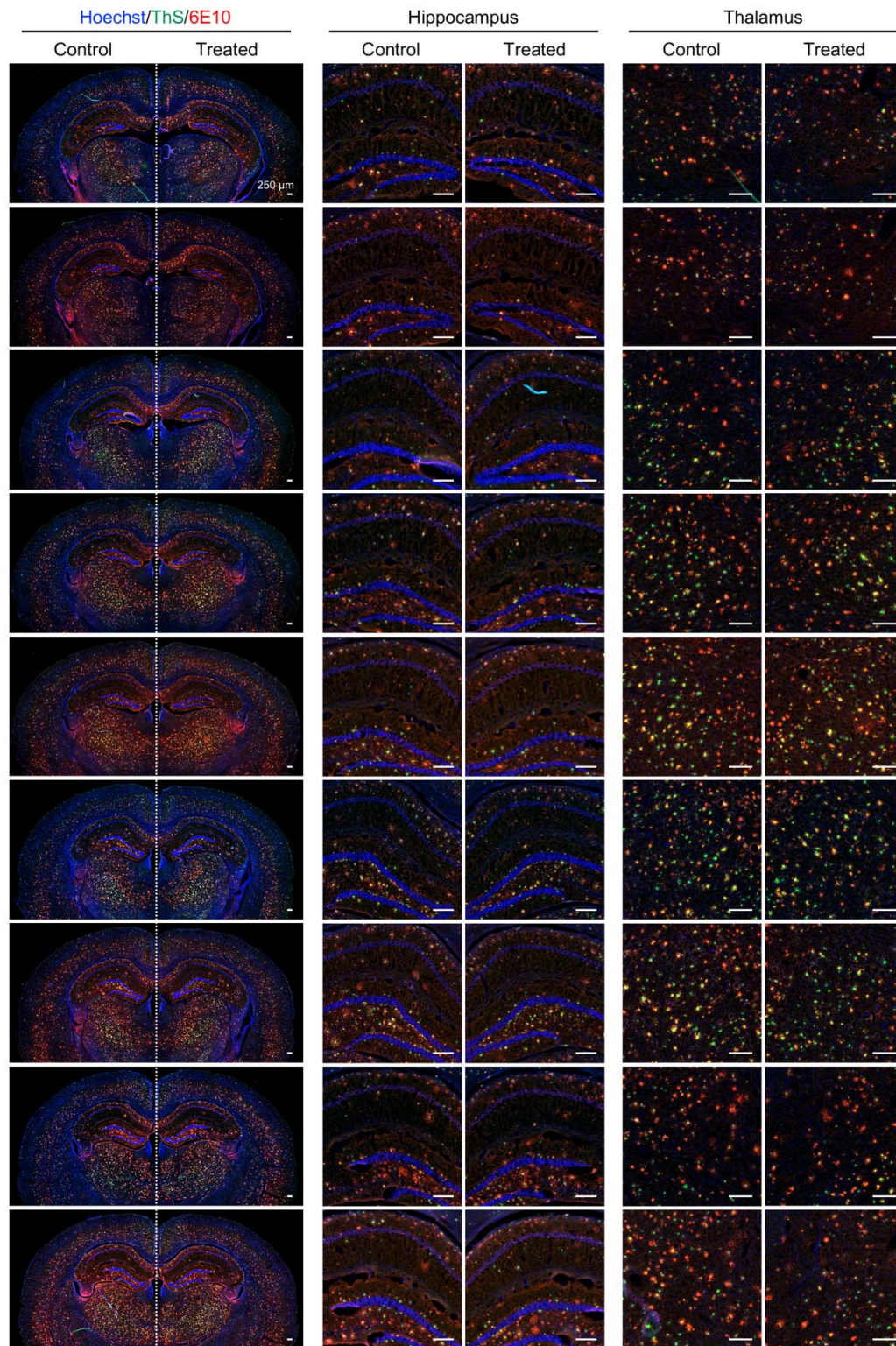


**Supplementary Figure 1. TEM images showing FUS-induced disaggregation of A $\beta$ 42 fibrils *in vitro*.** Representative images of A $\beta$ 42 peptides before aggregation (0d), after 2 days of aggregation (2d), and after FUS exposure applied to 2-day aggregates (FUS). A magnified image corresponding to the red square is presented on the right.

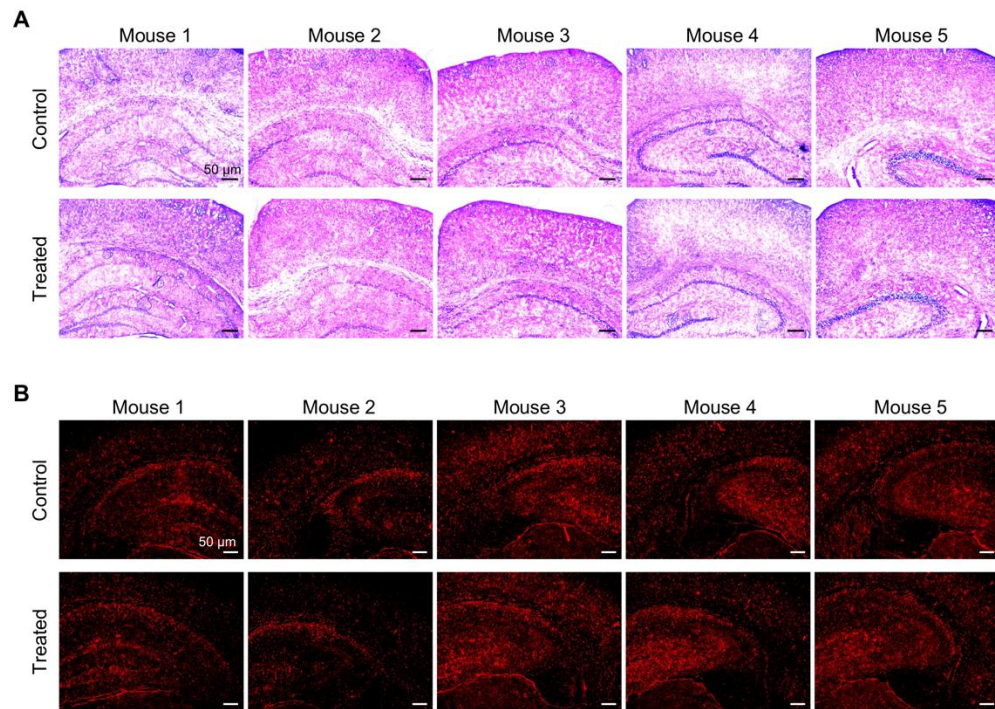


**Supplementary Figure 2. Dot blot analysis of A $\beta$ 42 oligomers after FUS treatment *in vitro*.** The entire membrane image for the dot blot using the A11 antibody (1:1,500). A $\beta$ 42 peptides before aggregation (0d), after 2 days of aggregation (2d), and after FUS exposure applied to 2-day aggregates (FUS) were blotted on the nitrocellulose membrane. Asterisk indicates a sample not related to this experiment.





**Supplementary Figure 3. ThS and 6E10 co-staining in FUS-treated 5XFAD mice.** Two brain sections per mouse were used for plaque counting; however, one section was excluded due to image quality issues. The hippocampal and thalamic regions of non-treated (Control) and FUS-treated (Treated) hemispheres are presented.



**Supplementary Figure 4. H&E and GFAP staining in FUS-treated 5XFAD mice. (A) H&E and (B) GFAP** immunostaining in FUS-treated 5XFAD mice. Whole hippocampal images of the non-treated right hemisphere (Control) and FUS-treated left hemisphere (Treated).