Supplementary Information

Highly Efficient Soluble Expression, Purification and Characterization of Recombinant Aβ42 from *Escherichia coli*

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Table S1. The nucleotide sequence of $(NANP)_3$-TEV-Aβ_{42} and primers used in amplification PCR

name	5'-3'
$(NANP)_3$-TEV-Aβ42	AATGCCAATCCGAATGCCAACCCGAACGCCAACCCGGAAAA CCTGTACTTCCAGGATGCCGAGTTTCGCCATGATAGCGGCTA TGAGGTGCACCACCAGAAACTGGTGTTCTTTGCCGAGGATGT GGGCAGCAACAAAGGCGCCATTATTGGCCTGATGGTGGGTG GCGTGGTGATTGCC
*Eco*RI-Aβ42-F	CGGAATTCAATGCCAATCCGAATGCCA
*Hin*dIII-Aβ42-R	CCAAGCTTTTAGGCAATCACCACGCC

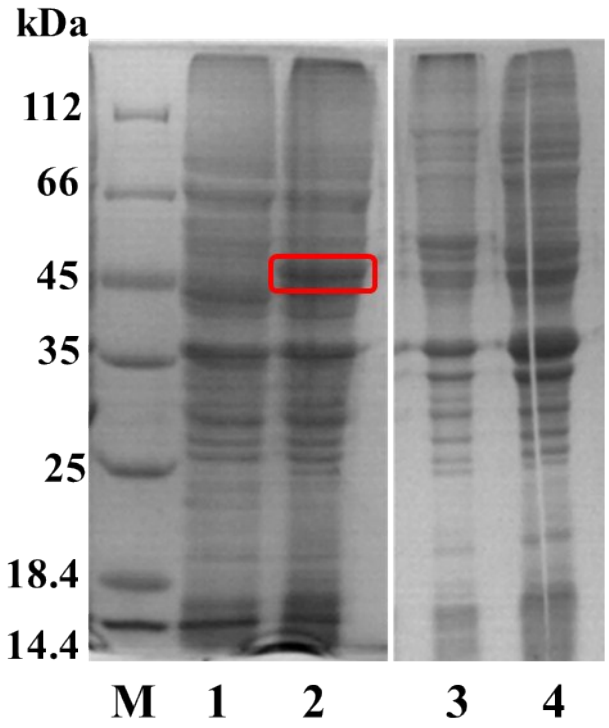

Fig S1. SDS-PAGE analysis of the soluble and insoluble fraction. BL21-MBP-Aβ42 and BL21 cells were sonicated and divided into pellet and supernatant fraction after induction by 0.5 mM IPTG. M: protein marker; 1: BL21 soluble fraction; 2: BL21-MBP-Aβ42 soluble fraction; 3: BL21 cells debris fraction; 4: BL21-MBP-Aβ42 cells debris fraction.

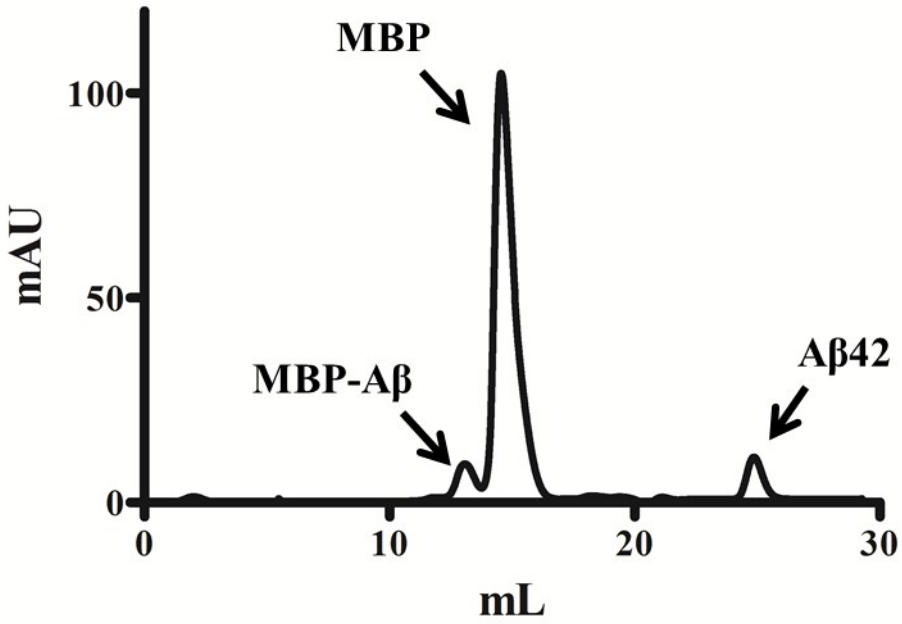

Fig S2. Chromatographic profile of the recombinant Aβ42 purified by size-exclusion chromatography on a Superdex 200 Increase column.

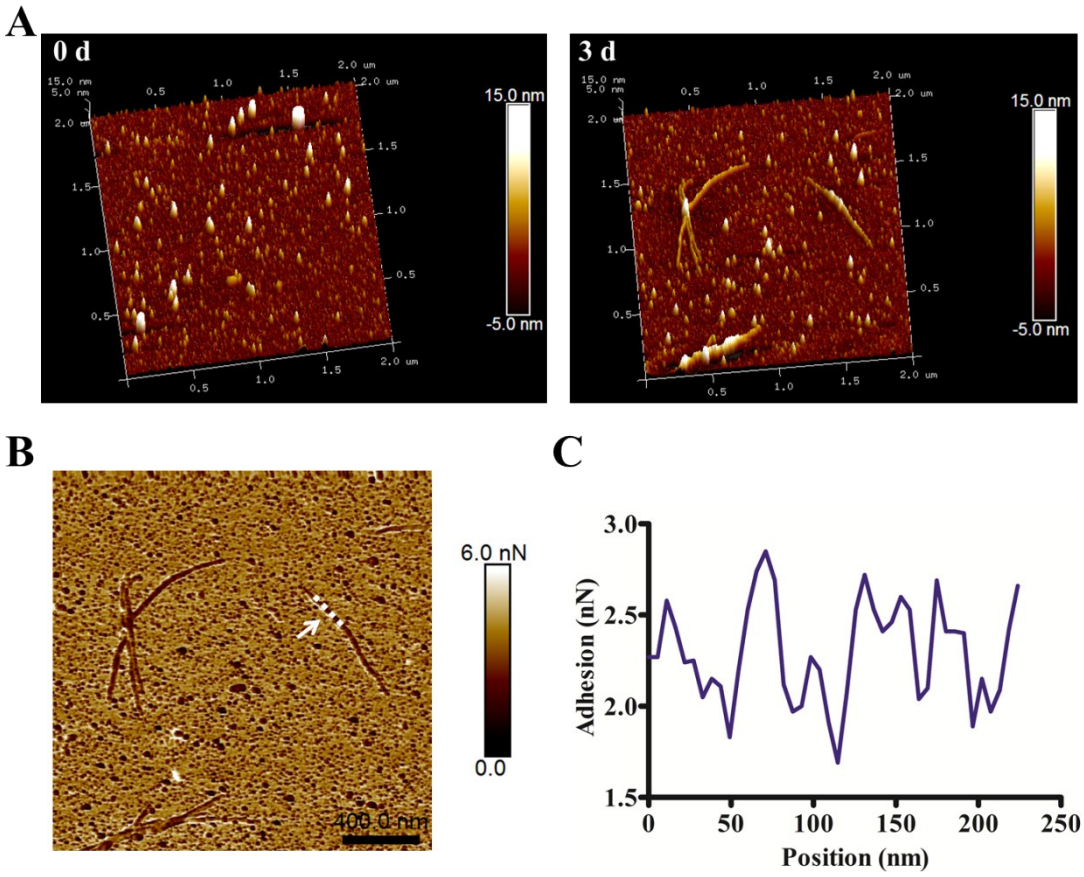

Fig S3. AFM images of recombinant Aβ42 aggregates. A: 3D images of Aβ42 aggregates after incubation for 0 and 3 days. B: AFM adhesion image of Aβ42 fibrils after 3 days' incubation. C: Adhesion profile of the dashed white line marked the position along the fibril was analyzed.