SUPPORTING INFORMATION

Mutations that replace aromatic side chains promote aggregation of the Alzheimer's Aβ peptide

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RUNNING TITLE: Decreased Aromaticity Promotes A-Beta Aggregation

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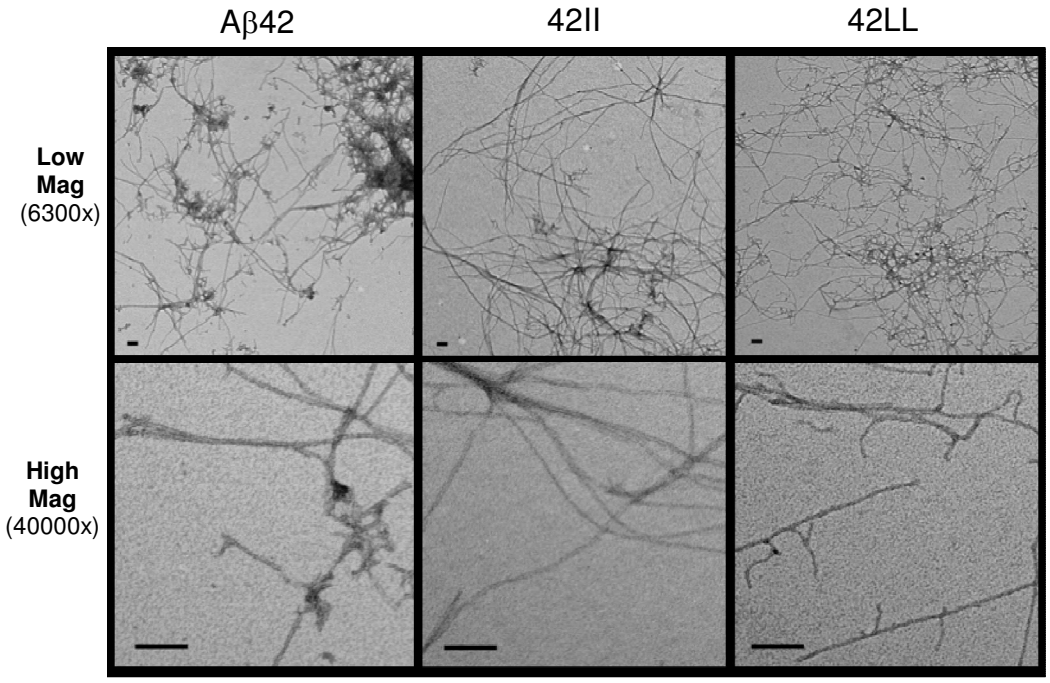

Figure S1: EM images of Aβ42, 42II, and 42LL fibrils after 14 days of incubation shown at multiple magnifications to highlight the morphological differences between the mature aggregates of the three peptides. Low magnification images (top) show the gross morphologies of the fibril groups with amorphous clumps apparent in wild-type Aβ42, while long, straight fibrils predominate in 42II, and 42LL shows a preponderance of shorter, kinked fibrils interspersed with longer fibrils. High magnification images (bottom) show these morphological differences are apparent at the level of individual fibrils.

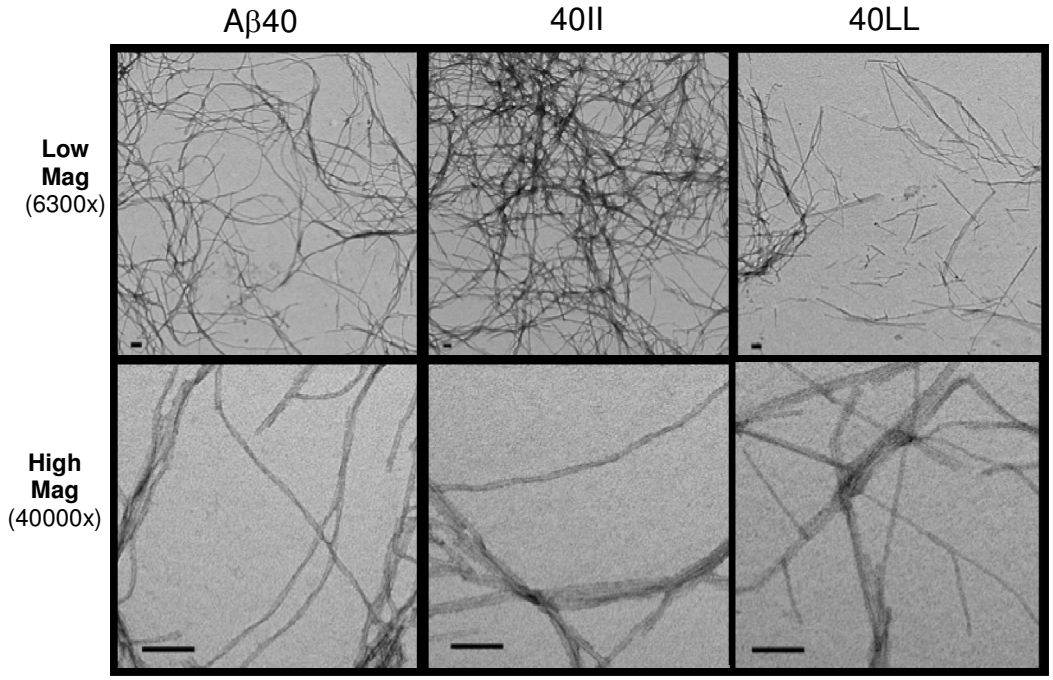

Figure S2: EM images of Aβ40, 40II, and 40LL fibrils after 21 days of incubation are presented at multiple magnifications. Low magnification images (top) show that Aβ40 is dominated by long fibrils. A similar morphology is apparent in 40II but the fibril collection is significantly denser. In 40LL, there is a preponderance of short fibrils. These morphological distinctions are apparent in individual fibrils at higher magnification (bottom)