

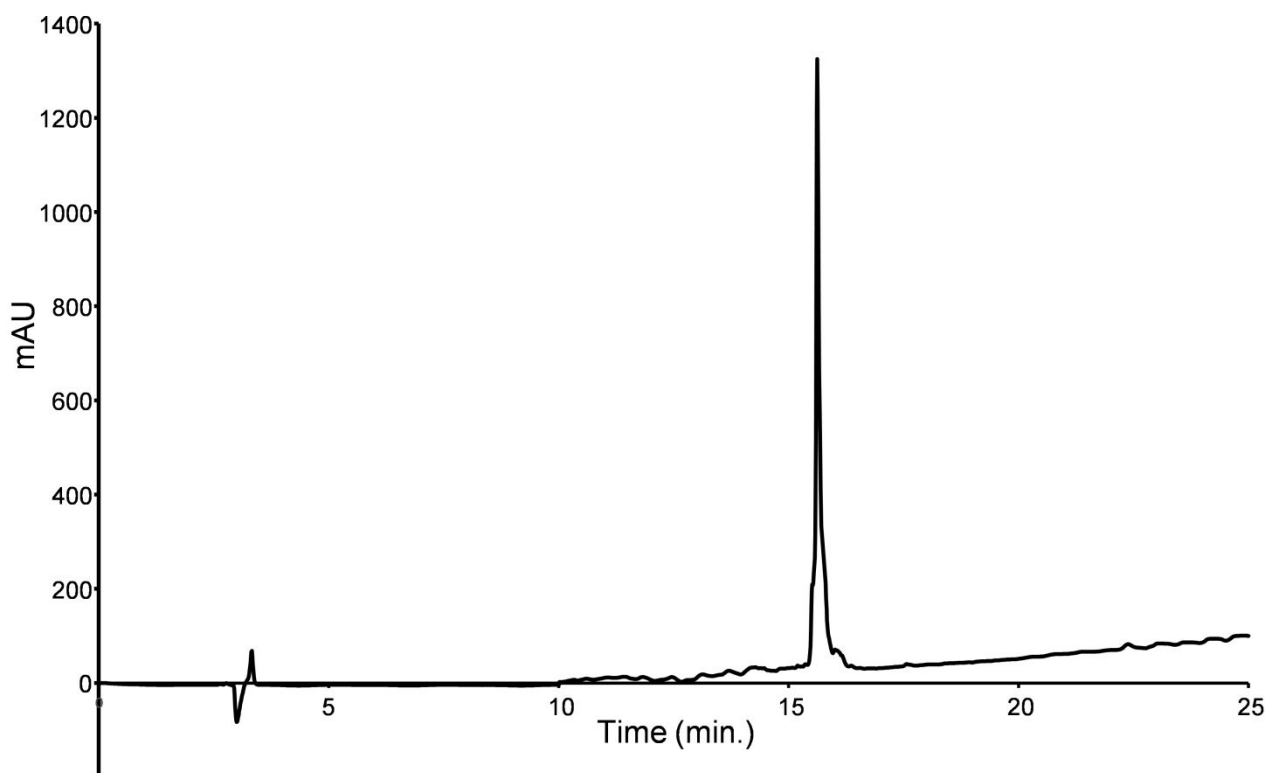
## Supporting information

### The A $\beta_{8-20}$ fragment as anti-fibrillogenic and neuroprotective agent: advancing towards efficient Alzheimer's disease treatment

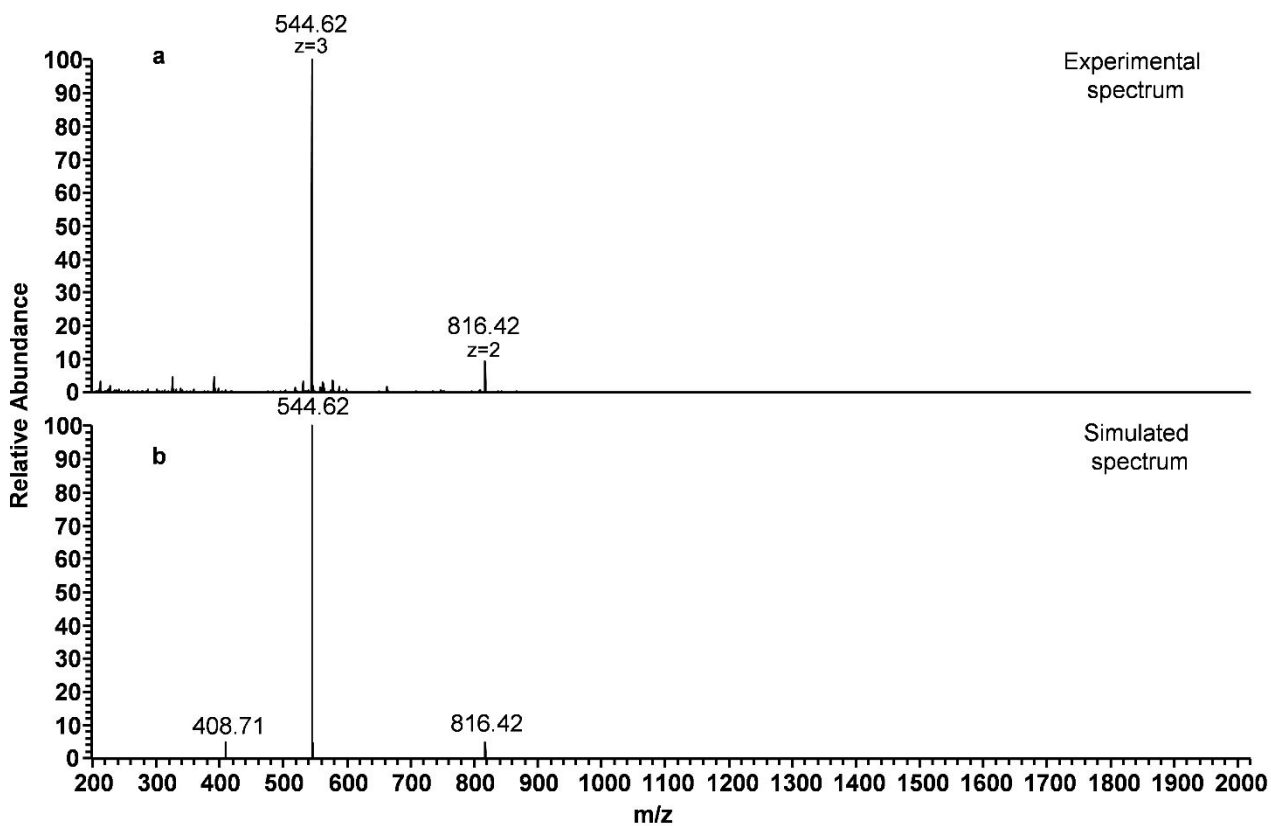
Stefania Zimbone<sup>†</sup>, Maria Laura Giuffrida<sup>†</sup>, Giuseppina Sabatino<sup>†</sup>, Giuseppe Di Natale<sup>†</sup>, Rita Tosto<sup>†</sup>, Grazia M. L. Consoli<sup>‡</sup>, Danilo Milardi<sup>†</sup>, Giuseppe Pappalardo<sup>†\*</sup> and Michele F.M. Sciacca<sup>†\*</sup>

<sup>†</sup>Consiglio Nazionale delle Ricerche, Istituto di Cristallografia, Via Paolo Gaifami, 18, Catania, Italy.

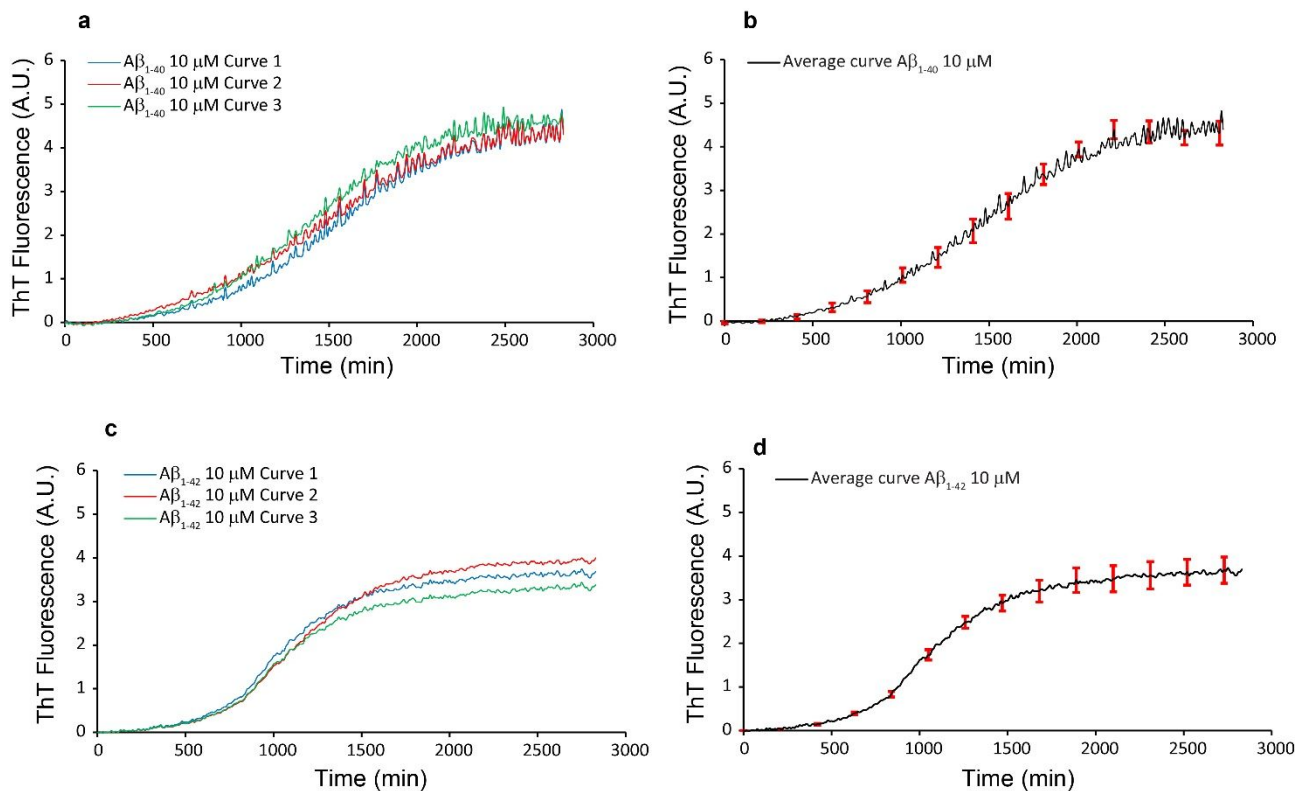
<sup>‡</sup>Consiglio Nazionale delle Ricerche, Istituto di Chimica Biomolecolare, Via Paolo Gaifami, 18, Catania, Italy.



**Figure S1.** Chromatographic profile of A $\beta_{8-20}$  recorded at  $\lambda_{\max}=220$  nm using a Phenomenex Kinetex XB- C18 analytical column (pore size: 100 Å, particle size: 5  $\mu\text{m}$ , column length: 250 mm, internal diameter: 4,60 mm).



**Figure S2.** Panel a) FT-MS spectra (m/z range: 200–2000) of the A $\beta$ <sub>8-20</sub> ( $C_{\text{peptide}}=5 \cdot 10^{-6}\text{M}$ ) at pH 7.0. Panel b) simulated m/z signals calculated by the molecular formula C<sub>78</sub>H<sub>110</sub>N<sub>20</sub>O<sub>19</sub> corresponding to the A $\beta$ <sub>8-20</sub> peptide.



**Figure S3.** Panel a) three replicas of ThT measurement of  $A\beta_{1-40}$   $10 \mu\text{M}$ . Panel b) average curve of  $A\beta_{1-40}$   $10 \mu\text{M}$  with standard deviation. Panel c) three replicas of ThT measurement of  $A\beta_{1-42}$   $10 \mu\text{M}$ . Panel d) average curve of  $A\beta_{1-42}$   $10 \mu\text{M}$  with standard deviation.