



Suppl. Table S1. The p-values for all pairwise comparisons using the Tukey test for A β ₁₋₄₀ aggregation assay

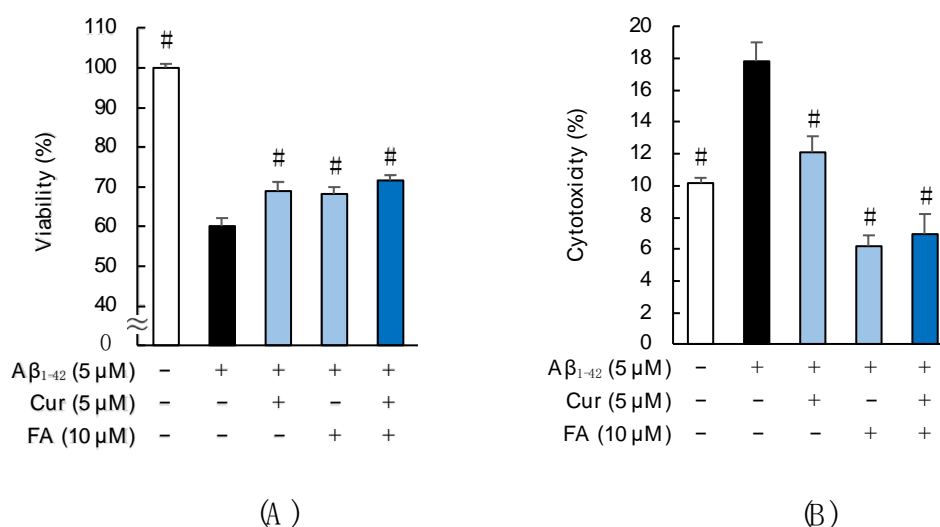
	Aβ ₁₋₄₀	1 μM Cur	5 μM Cur	10 μM Cur	1 μM FA	10 μM FA	20 μM FA	50 μM FA	1 μM Cur + 10 μM FA	5 μM Cur +10 μM FA
Aβ ₁₋₄₀	1.0000	< 0.0001	< 0.0001	0.9196	0.8446	0.3851	0.7101	0.0884	< 0.0001	
1 μM Cur		< 0.0001	< 0.0001	0.7232	0.523	0.1348	0.3925	0.1242	< 0.0001	
5 μM Cur			0.5175	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.0004	0.9875	
10 μM Cur				< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.9788	
1 μM FA					1.0000	0.9997	1.0000	0.0072	< 0.0001	
10 μM FA						0.9969	1.0000	0.0008	< 0.0001	
20 μM FA							1.0000	< 0.0001	< 0.0001	
50 μM FA								0.0008	< 0.0001	
1 μM Cur + 10 μM FA									< 0.0001	
5 μM Cur + 10 μM FA									< 0.0001	

Thioflavin T (ThT) fluorescence assay was used to compare the effects of Cur, FA, and the combination of both on the aggregation rate of A β ₁₋₄₀ peptide at 360 min. A β ₁₋₄₀ is aggregation of the A β ₁₋₄₀ peptide alone. Statistical significances are in boldface.

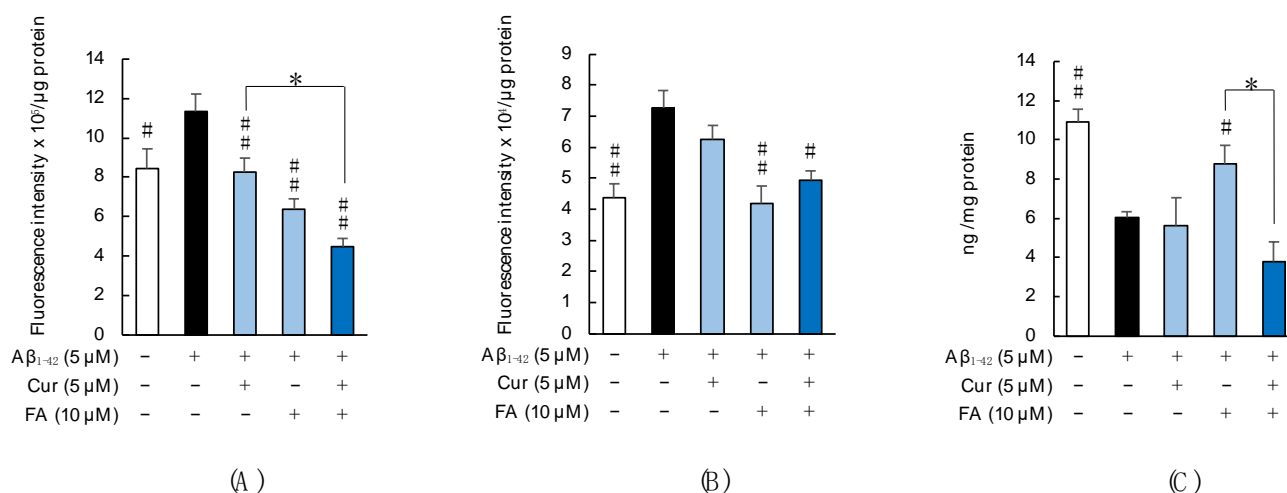
Suppl. Table S2. The p-values for all pairwise comparisons using the Tukey test for A β ₁₋₄₂ aggregation assay

	Aβ1-42	1 μM Cur	5 μM Cur	10 μM Cur	1 μM FA	10 μM FA	20 μM FA	50 μM FA	1 μM Cur + 10 μM FA	5 μM Cur + 10 μM FA
Aβ1-42		0.0004	< 0.0001	< 0.0001	0.9821	0.9884	0.5242	0.572	< 0.0001	< 0.0001
1 μM Cur			< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.9121	< 0.0001
5 μM Cur				< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.0842
10 μM Cur					< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
1 μM FA						1.0000	0.9988	0.9997	< 0.0001	< 0.0001
10 μM FA							0.9821	0.9911	< 0.0001	< 0.0001
20 μM FA								1.0000	< 0.0001	< 0.0001
50 μM FA									< 0.0001	< 0.0001
1 μM Cur + 10 μM FA										< 0.0001
5 μM Cur + 10 μM FA										

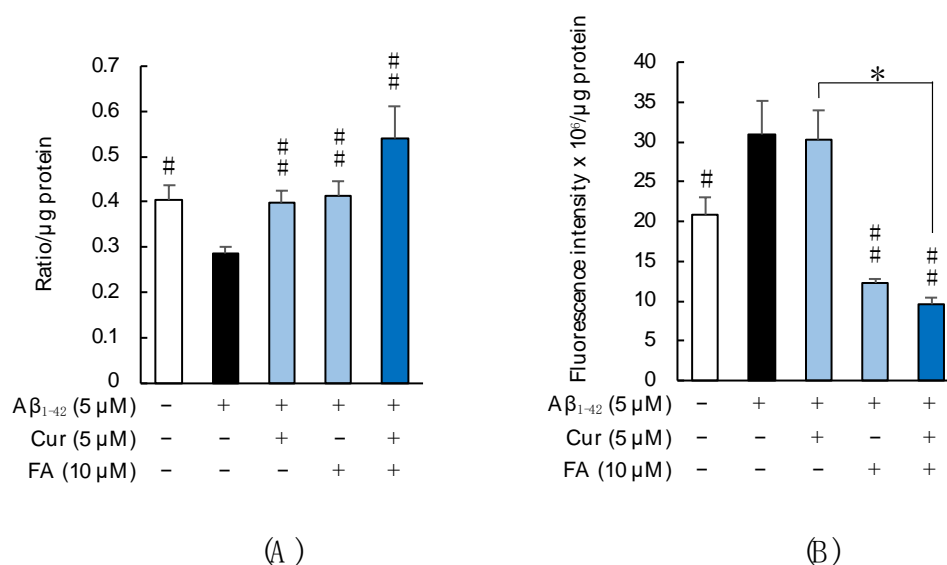
Thioflavin T (ThT) fluorescence assay was used to compare the effects of Cur, FA, and the combination of both on the aggregation rate of A β ₁₋₄₂ peptide at 120 min. A β ₁₋₄₂ is aggregation of the A β ₁₋₄₂ peptide alone. Statistical significances are in boldface.



Suppl. Figure S1. Effect of Cur, FA, or a combination of both on the viability and cytotoxicity in Aβ₁₋₄₂-stimulated SH-SY5Y cells. (A) The viability in Aβ₁₋₄₂-stimulated SH-SY5Y cells was evaluated using MTT assay. Cell viability of SH-SY5Y cells exposed with 5 μM Aβ₁₋₄₂ and treated with Aβ₁₋₄₂ + 5 μM Cur, Aβ₁₋₄₂ + 10 μM FA or Aβ₁₋₄₂ + Cur + FA for 3 hr. (B) The cytotoxicity in Aβ₁₋₄₂-stimulated SH-SY5Y cells was evaluated using EthD-1 Cell assay. The cytotoxicity of SH-SY5Y cells exposed with 5 μM Aβ₁₋₄₂ and treated with Aβ₁₋₄₂ + 5 μM Cur, Aβ₁₋₄₂ + 10 μM FA or Aβ₁₋₄₂ + Cur + FA for 3 hr. +: inclusion of 5 μM Aβ₁₋₄₂, 1 μM Cur, 10 μM FA, respectively, -: non-inclusion. The p-values in ANOVA were < 0.001. Each value expresses the mean + S.E.M. of at least 3 in-dependent experiments. #, p < 0.01; Aβ₁₋₄₂ exposed cells versus the other treated cells (n = 6, Tukey)



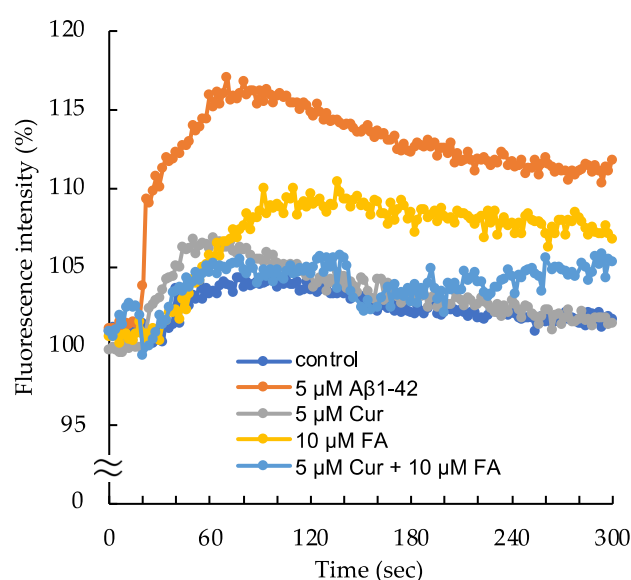
Suppl. Figure S2. Effect of Cur, FA, or a combination of both on ROS generation, mitochondrial ROS and Mn-SOD in Aβ₁₋₄₂-stimulated SH-SY5Y cells. The generation of ROS (A), mitochondrial ROS level (B), Mn-SOD levels (C) in SH-SY5Y cells exposed with 5 μM Aβ₁₋₄₂ and treated with Aβ₁₋₄₂ + 5 μM Cur, Aβ₁₋₄₂ + 10 μM FA or Aβ₁₋₄₂ + Cur + FA. +: inclusion of 5 μM Aβ₁₋₄₂, 1 μM Cur, 10 μM FA, respectively, -: non-inclusion. The p-values in ANOVA were < 0.001. Each value expresses the mean + S.E.M. of at least 3 in-dependent experiments. #, p < 0.05; ##, p < 0.01 for Aβ₁₋₄₂ exposed cells versus the other treated cells (n = 6, Tukey); *, p < 0.01 for Aβ₁₋₄₂ + Cur + FA-treated cells versus Cur or FA-treated cells (n = 6, Tukey).



Suppl. Figure S3. Effect of Cur, FA, or a combination of both on membrane integrity in $A\beta_{1-42}$ -stimulated SH-SY5Y cells. The fluidity (A) and phospholipid peroxidation (B) of cell membranes in SH-SY5Y cells exposed with 5 μM $A\beta_{1-42}$ and treated with $A\beta_{1-42}$ + 5 μM Cur, $A\beta_{1-42}$ + 10 μM FA or $A\beta_{1-42}$ + Cur + FA.

+: inclusion of 5 μM $A\beta_{1-42}$, 1 μM Cur, 10 μM FA, respectively, -: non-inclusion. The p-values in ANOVA were < 0.001 . Each value expresses the mean + S.E.M. of at least 3 independent experiments.

#, $p < 0.05$; ##, $p < 0.01$ for $A\beta_{1-42}$ exposed cells versus the other treated cells (n = 6, Tukey); *, $p < 0.001$ for $A\beta_{1-42}$ + Cur + FA-treated cells versus Cur-treated cells (n = 6, Tukey).



Suppl. Figure S4. Detection of changes in intracellular ionized calcium concentration ($[Ca^{2+}]_i$) in SH-SY5Y cells.

Changes in $[Ca^{2+}]_i$ were measured for fluorescence intensity in cells exposed to 5 μM $A\beta_{1-42}$ and cells treated with $A\beta_{1-42}$ + 5 μM Cur, $A\beta_{1-42}$ + FA, or $A\beta_{1-42}$ + 5 μM Cur + FA. The control fluorescence intensity added with 20 mM HEPES and 1 × Hank's Balanced Salt solution. The fluorescence intensity was evaluated with the value at on-set as 100 %.