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Supplementary Data

# 4-*O*-Methylhonokiol Attenuated Memory Impairment Through Modulation of Oxidative Damage of Enzymes Involving Amyloid-β Generation and Accumulation in a Mouse Model of Alzheimer's Disease

Im Seop Choi[a,b], Young-Jung Lee[a,b], Dong-Young Choi[a,c], Yong Kyung Lee[a], Yeun Hee Lee[a], Ki Ho Kim[d], Young Heui Kim[d], Young Ho Jeon[e], Eun Hee Kim[f], Sang Bae Han[a,b,c], Jae Kyung Jung[a,b], Yeo Pyo Yun[a], Ki-Wan Oh[a], Dae Youn Hwang[g] and Jin Tae Hong[a,b,c,*]
[a]*College of Pharmacy, Chungbuk National University, Heungduk-gu, Cheongju, Chungbuk, Korea*
[b]*Medical Research Center, Chungbuk National University, Heungduk-gu, Cheongju, Chungbuk, Korea*
[c]*CBITRC, Chungbuk National University, Heungduk-gu, Cheongju, Chungbuk, Korea*
[d]*R&D Center, Bioland Ltd., Songjeong, Byongchon, Cheonan-Si, Chungnam, Korea*
[e]*College of Pharmacy, Korea University, Jochiwon, Yeongi, Chungnam, Republic of Korea*
[f]*Korea Basic Science Institute, Ochang, Cheongwon, Chungbuk, Korea*
[g]*Department of Biomaterial Science, Pusan National University, Miryang, Kyungnam, Korea*

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*Correspondence to: Jin Tae Hong, Ph.D., College of Pharmacy, Chungbuk National University, 12, Gaeshin-dong, Heungduk-gu, Cheongju, Chungbuk 361-763, Korea. Tel.: +82 43 261 2813; Fax: +82 43 268 2732; E-mail: jinthong@chungbuk.ac.kr.

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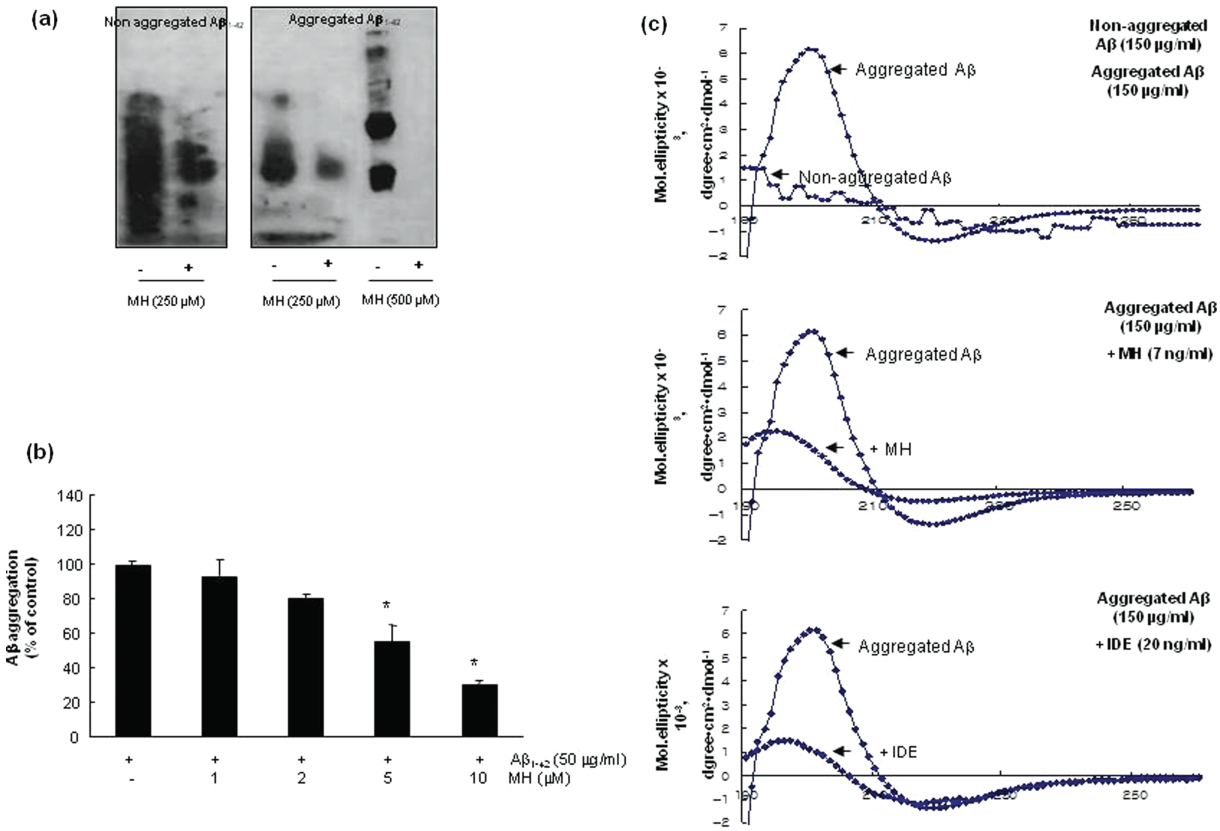


Supplementary Figure 1. Inhibition by 4-*O*-methylhonokiol of synthetic $A\beta_{1\text{-}42}$ peptide aggregation. a) $A\beta_{1\text{-}42}$ (final concentration 50 μg/ml) peptide was incubated with or without 4-*O*-methylhonokiol (250 μM and 500 μM) at 37°C for 4 days. Bands were visualized by western blotting analysis probed with Anti-Aβ antibody. b), To measure the 4-*O*-methylhonokiol effects on the Aβ fibrillogenesis, $A\beta_{1\text{-}42}$ was mixed with/without 4-*O*-methylhonokiol (1-10 μM) in the presence of fluorescence dye, thioflavin T. Fluorescence was measured within 5 s in a TECAN spectrofluorometer with the excitation and emission wavelengths of 450 and 485 nm, respectively. The effect of 4-*O*-methylhonokiol was tested in three independent experiments. *Significantly different from control group in which $A\beta_{1\text{-}42}$ is aggregated without 4-*O*-methylhonokiol ($p < 0.05$). c) The circular dichroism spectra were acquired using J-715 spectropolarimeter (JASCO, Japan). The protein sample (Aβ 150 μg) was measured using a 1 mm pathlength cell in buffer soln. Circular dichroism spectra of Aβ microfibrils before and after enzymatic (IDE) degradation or after incubation with/without 4-*O*-methylhonokiol for 24 h were recorded at 37°C. Data were acquired using a scan rate of 0.5 nm/sec and the data from five scans were averaged.