

[Electronic Supplementary Information]

**Graphene oxide-functionalized nanofibre composite matrices to
enhance differentiation of hippocampal neuronal cells**

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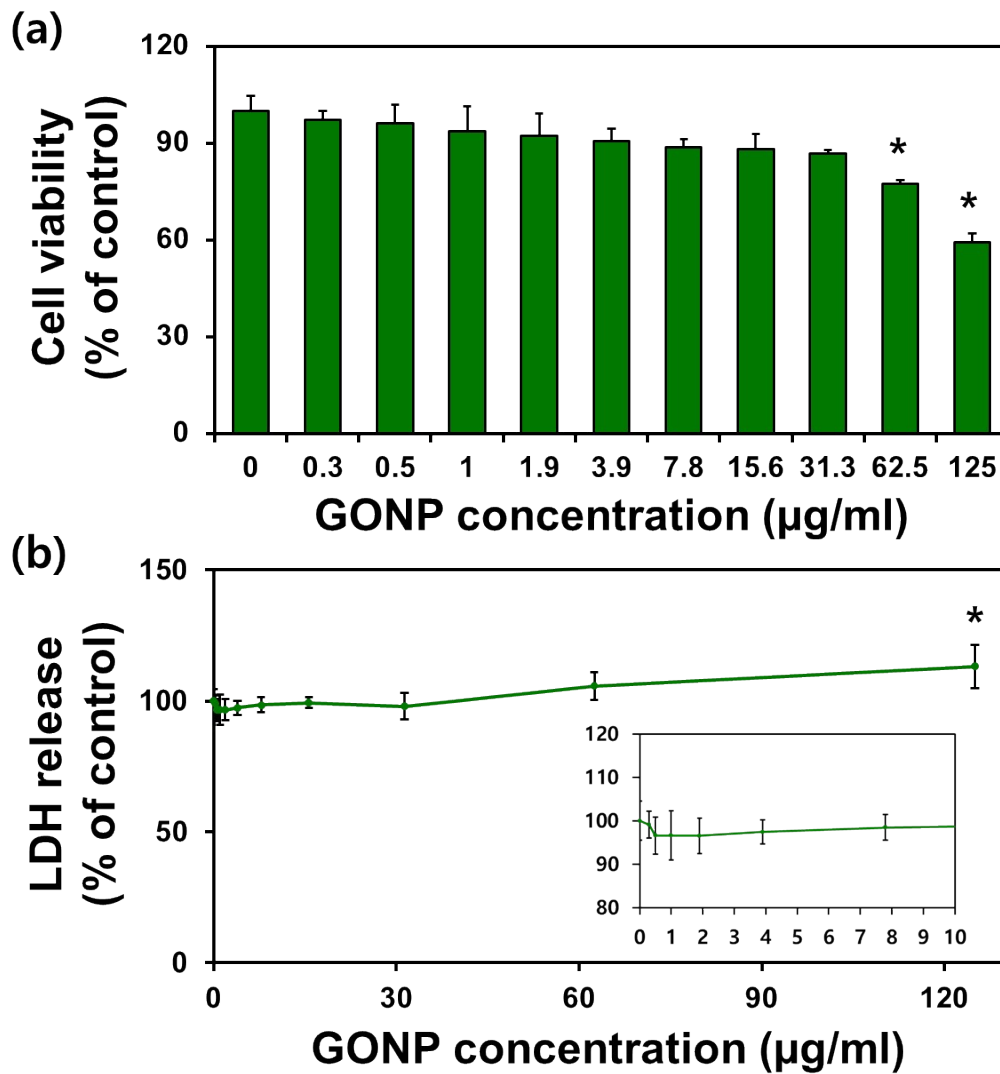


Figure S1. Cytotoxicity profiles of GONPs against HT22 hippocampal neuronal cells determined by (a) CCK-8 and (b) lactate dehydrogenase (LDH) assays. An asterisk (*) denotes a significant difference compared to the control, $p < 0.05$.

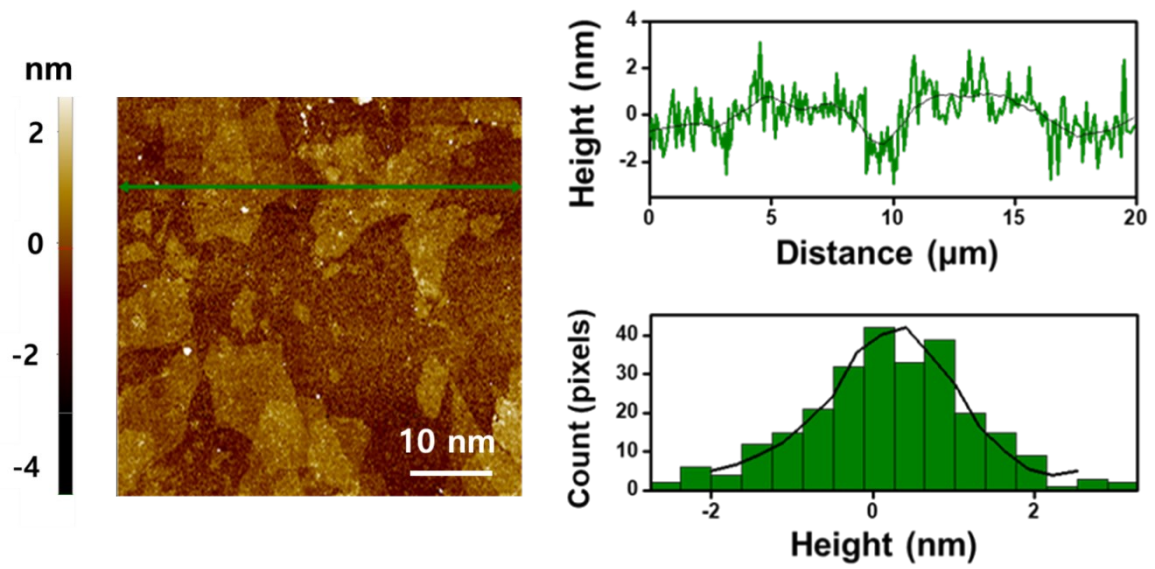


Figure S2. AFM image and height profile of GONPs.

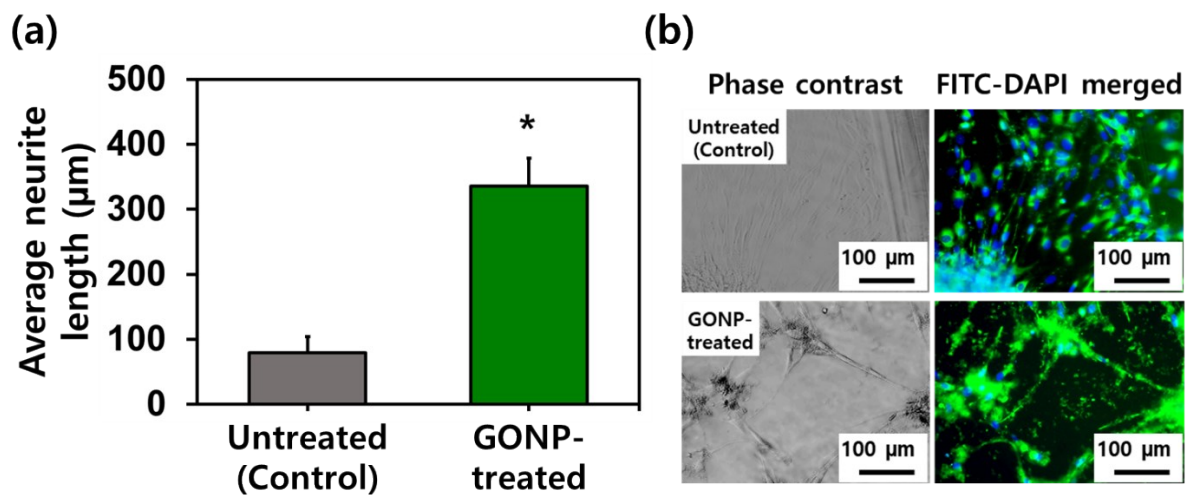


Figure S3. Immunocytochemical analysis. (a) Average neurite length and (b) confocal micrograph of HT22 hippocampal neuronal cells treated with or without 10 µg/mL GONPs. Fluorescence denotes the nucleus (blue from DAPI) and neurofilaments heavy chain (green from FITC), respectively. All images shown in this figure are representative of six independent experiments with similar results. An asterisk (*) denotes a significant difference compared to the untreated cells (control), $p < 0.05$.