

Supplementary Materials

Understanding the Role of the Lateral Dimensional Property of Graphene Oxide on its Interactions with Renal Cells

Wei Chen^{1,2}, Bing Wang^{1,*}, Shanshan Liang^{1,2}, Meng Wang¹, Lingna Zheng¹, Si Xu^{1,3}, Jiali Wang^{1,3}, Hao Fang^{1,2}, Pu Yang^{1,2}, Weiyue Feng^{1,*}

¹ CAS Key Laboratory for Biomedical Effects of Nanomaterials and Nanosafety, Institute of High Energy Physics, Chinese Academy of Sciences, Beijing 100049, China

² University of Chinese Academy of Sciences, Beijing 100049, China

³ School of Pharmacy in Yantai University, Yantai, 264005, China

* Correspondence, wangbing@ihep.ac.cn; fengwy@ihep.ac.cn

Tel.: +86-010-88233209

Table S1. Sequences of primers for RT-qPCR analysis

Genes	Forward primers (5'-3')	Reverse primers (5'-3')
<i>KEAP1</i>	CTGGAGGATCATACCAAGCAGG	GGATACCCTCAATGGACACCAC
<i>NRF2</i>	CAACTACTCCCAGGTTGCCC	TGGGGTTTTCCGATGACCAG
<i>NQO1</i>	GCTGGTTTGAGCGAGTGTTT	CTGCCTTCTTACTCCGGAAGG
<i>NOX2</i>	ACCTCAACTGCAGCCTTATC	ATCCAACAATCTCCTGGTTCTC
<i>TNFA</i>	AGCCCATGTTGTAGCAAACCC	GTAGGCCCCAGTGAGTTCTG
<i>IL1B</i>	GCCAATCTTCATTGCTCAAGTGT	AGCCATCATTTCACTGGCGA
<i>IL6</i>	CCTTCGGTCCAGTTGCCTTC	CACCAGGCAAGTCTCCTCATT
<i>IL18</i>	ATCGCTTCCTCTCGCAACAA	GTCCGGGGTGCATTATCTCT
<i>GAPDH</i>	ACCAAATCCGTTGACTCCGAC	CTCCTGTTTCGACAGTCAGCC

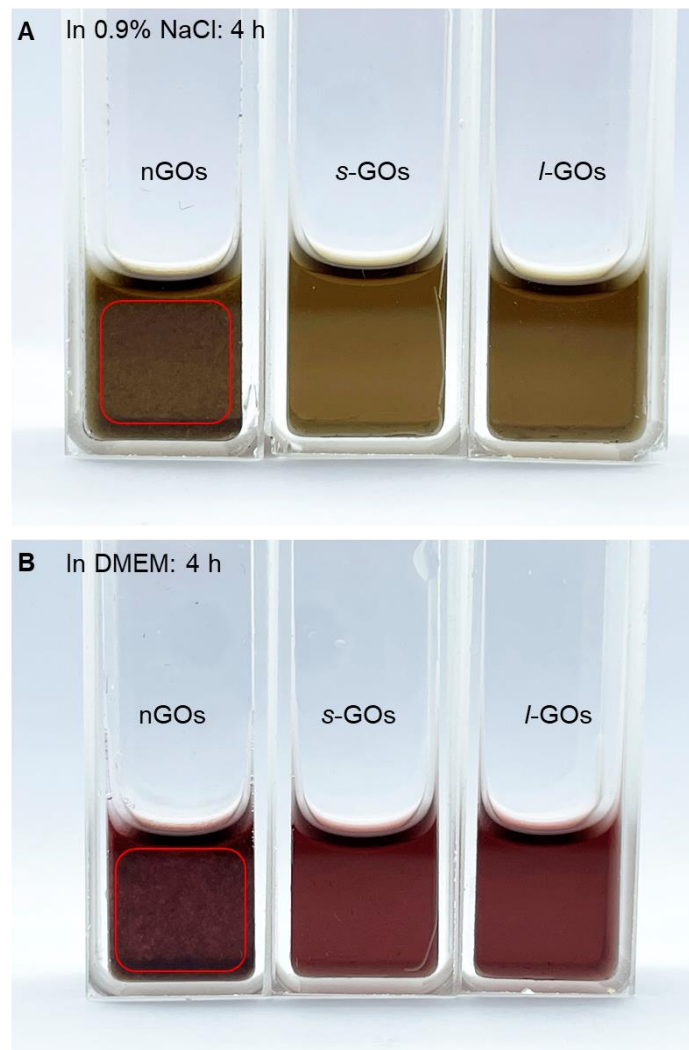


Figure S1. The photographs of nGOs, s-GOs and l-GOs dispersed in 0.9% NaCl (A) and DMEM (B) at 4 h. nGOs: non-pegylated GOs. Red square: GOs cluster formed by unstable.

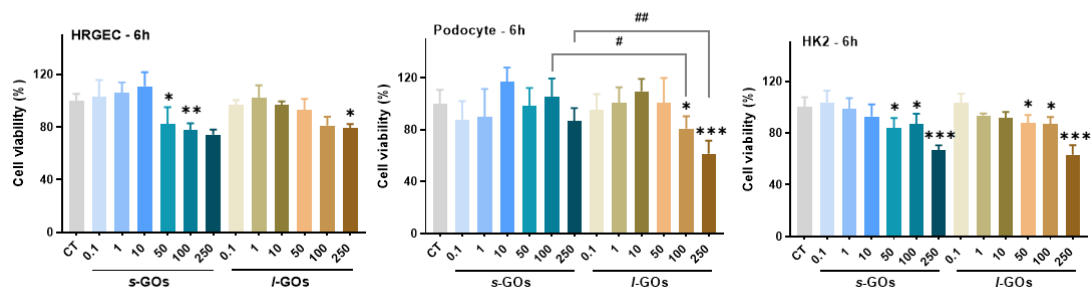


Figure S2. Cell viability assays of HRGEC, podocytes and HK-2 cells following 0.1, 1, 10, 50, 100, and 250 µg/mL doses of *s*-GO and *l*-GO treatments for 6 h.

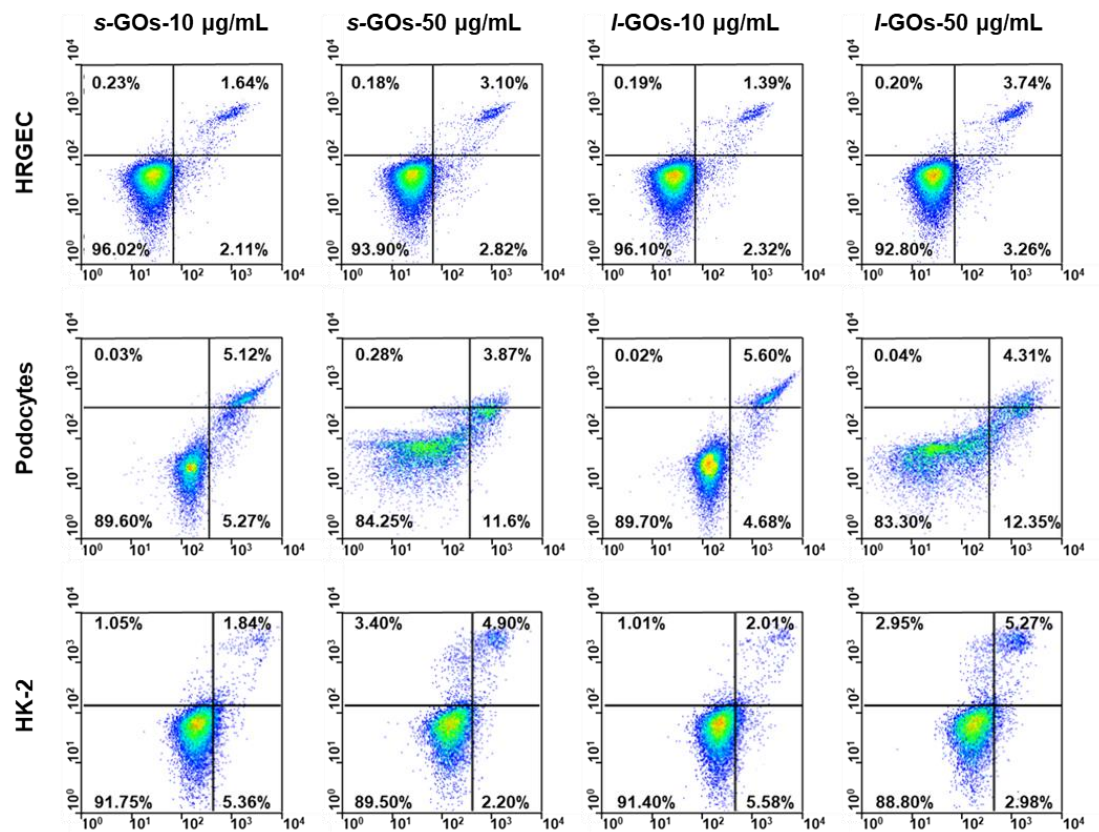


Figure S3. Annexin V-FITC/PI flow cytometry for the detection of cell apoptosis after cells were treated with 10 and 50 µg/mL *s*-GOs and *l*-GOs for 24 h.

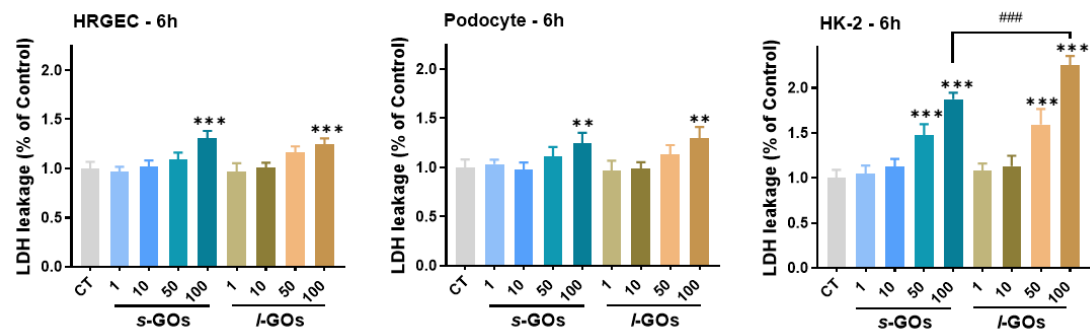


Figure S4. LDH leakage in HRGEC, podocytes and HK-2 cells after cells were treated with *s*-GOs and *l*-GOs for 6 h.