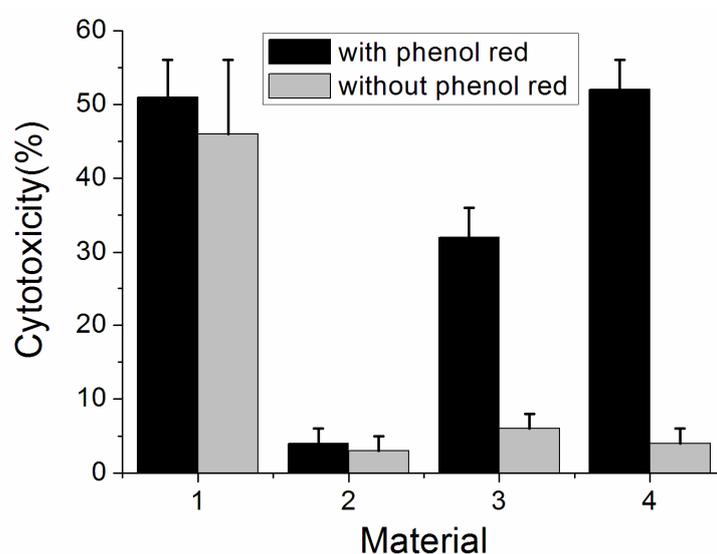
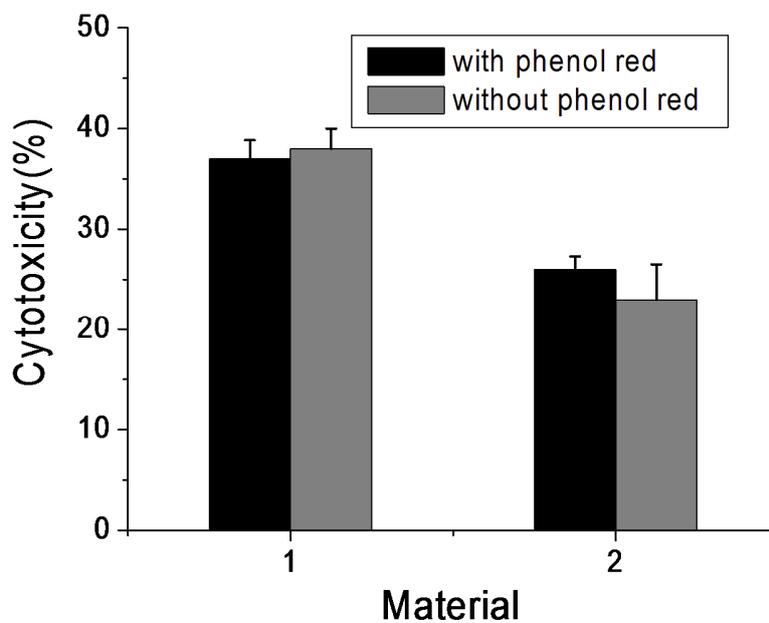


## Supplementary Information

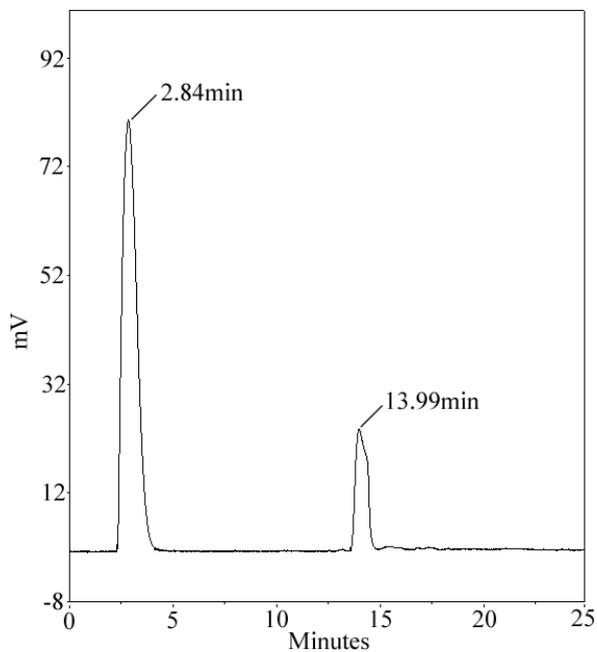
**Figure S1.** Cytotoxicity assessment of Hela cells exposed to MWNTs, PG, S160 and P90 (denoted by 1, 2, 3 and 4, respectively) in serum-free medium with or without phenol red by trypan blue exclusion assay. All data shown are the mean values of three experiments  $\pm$  SEM.



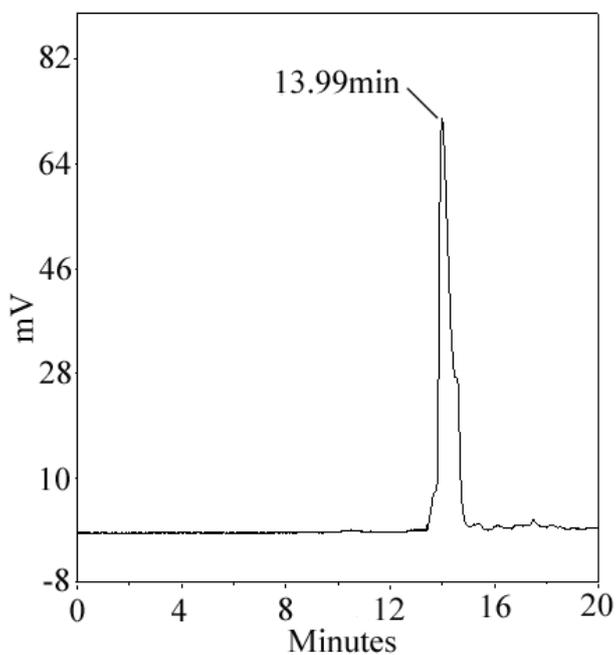
**Figure S2.** Cytotoxicity assessment of Hela cells exposed to MWNTs and P90 (denoted by 1 and 2, respectively) in complete cell culture medium with or without phenol red. All data shown are the mean values of three experiments  $\pm$  SEM.



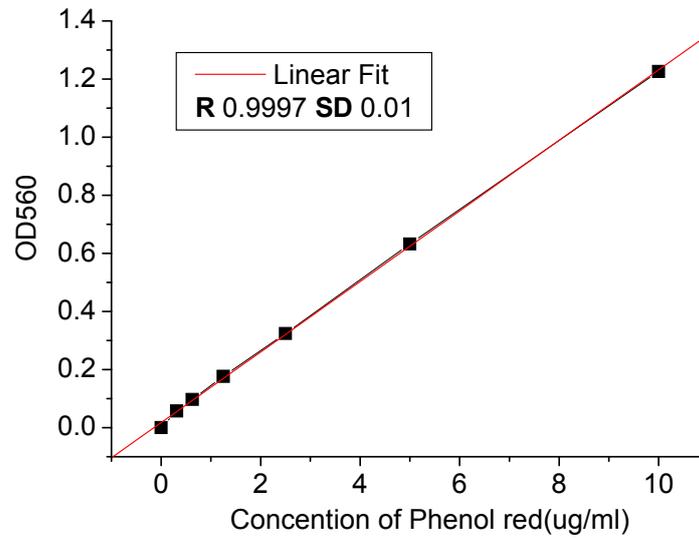
**Figure S3.** HPLC chromatogram of a mixture of free  $^{125}\text{I}$  and  $^{125}\text{I}$ -phenol red. The mobile phase was 0.1% trifluoroacetyl/acetonitrile gradient at flow rate of 1 mL/min. The UV absorption was monitored at 254 nm. Free iodine ions appeared at 2.84 minutes and  $^{125}\text{I}$ -phenol red appeared at 13.99 minutes.



**Figure S4.** HPLC chromatogram of  $^{125}\text{I}$ -phenol red.  $^{125}\text{I}$ -phenol red appeared at 13.99 minutes with a peak area ratio of 100%.



**Figure S5.** Standard curve of phenol red in culture medium.



**Figure S6.** HPLC chromatogram of  $^{125}\text{I}$ -phenol red after incubating in serum-free cell culture medium for 8 h.  $^{125}\text{I}$ -phenol red appeared at 13.99 minutes with a peak area ratio of 98 % and free iodine ions appeared at 2.84 minutes with a peak area ratio of 0.5%. Im1 and Im2 are impurities.

