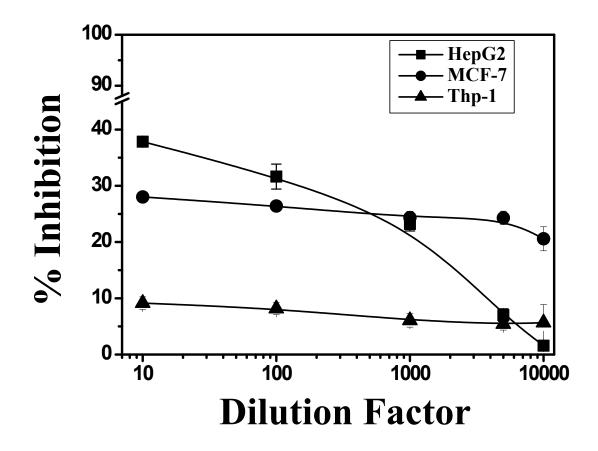
## Intrinsic therapeutic and biocatalytic Roles of ionic liquid mediated self-assembled platinum-phytase nanosphere

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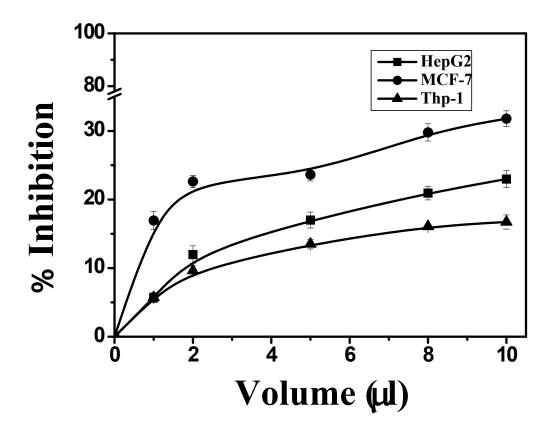
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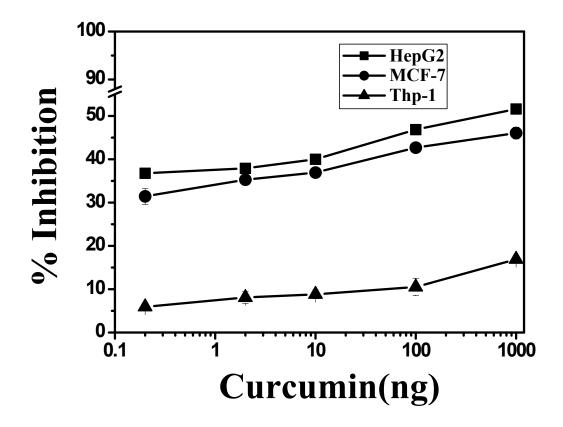
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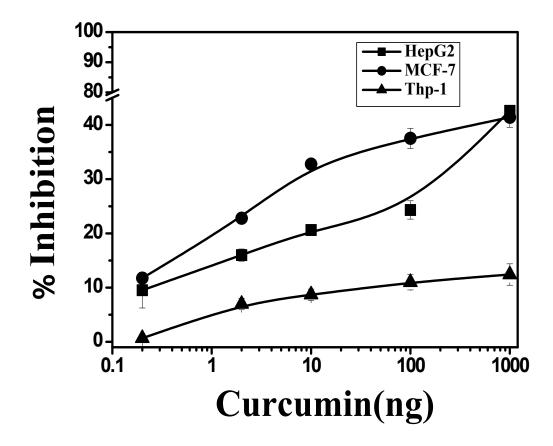
**Figure S1**. Cytotoxicity of  $K_2PtCl_6$  (10<sup>-3</sup> M) on HepG2 human hepatocellular carcinoma, MCF-7 breast cancer and THP-1 human acute monocytic leukemia cells. 5  $\mu$ l of sample was used for  $2x10^4$  cancer cells.



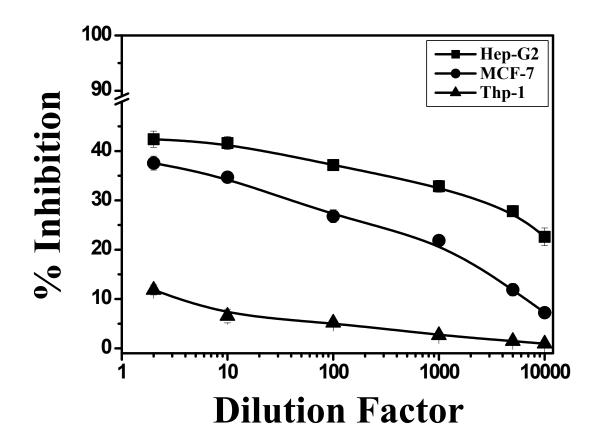
**Figure S2**. Cytotoxicity of Oleic acid (undiluted) on inhibition of HepG2 human hepatocellular carcinoma, MCF-7 breast cancer and THP-1 human acute monocytic leukemia cells.



**Figure S3**. Cytotoxicity of Curcumin (dissolved in Oleic acid) on inhibition of HepG2 human hepatocellular carcinoma, MCF-7 breast cancer and THP-1 human acute monocytic leukemia cells. 5  $\mu$ l of sample was used for  $2x10^4$  cancer cells.



**Figure S4**. Cytotoxicity of Curcumin (dissolved in D/W) on inhibition of HepG2 human hepatocellular carcinoma, MCF-7 breast cancer and THP-1 human acute monocytic leukemia cells. 5  $\mu$ l of sample was used for  $2x10^4$  cancer cells.



**Figure S5**. Cytotoxicity of Ionic Liquid [BMIM][BF<sub>4</sub>] (diluted in D/W) on inhibition of HepG2 human hepatocellular carcinoma, MCF-7 breast cancer and THP-1 human acute monocytic leukemia cells. 5  $\mu$ l of sample was used for  $2x10^4$  cancer cells.

## **F. N:** Every experimental point value is in triplicate.

Incubation time: HepG2 cell: 4 days, MCF-7 cell: 7 days, THP-1 cell: 5 days