Electronic Supplementary Information

of

MMP-responsive theranostic nanoplatform based on mesoporous silica nanoparticles for tumor imaging and targeted drug delivery

Jing-Jing Hu, Li-Han Liu, Ze-Yong Yi, Ren-Xi Zhuo, Xian-Zheng Zhang*

Key Laboratory of Biomedical Polymers of Ministry of Education & Department of Chemistry, Wuhan University, Wuhan 430072, China

* To whom correspondence should be addressed. Tel. & Fax: 86-27-68754509.
E-mail address: xz-zhang@whu.edu.cn (X. Z. Zhang).
Table S1 Zeta potentials of different nanoparticles in DI water.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Zeta Potential (mV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSN</td>
<td>-18.3</td>
</tr>
<tr>
<td>MSN-NH$_2$</td>
<td>26.4</td>
</tr>
<tr>
<td>MSN-alkyne</td>
<td>33.3</td>
</tr>
<tr>
<td>MSN-MFIP&amp;cRGD</td>
<td>17.9</td>
</tr>
</tbody>
</table>
Scheme S1 Synthesis of MSN-MFIP&cRGD.
Figure S1 (A) Nitrogen adsorption-desorption isotherms. (B) Pore size distribution of MSN.
Figure S2 FT-IR spectra of CTAB@MSN (A), MSN (B), MSN-NH$_2$ (C), MSN-alkyne (D) and MSN-MFIP&cRGD (E).
Figure S3 ESI-MS of MFIP.
Figure S4 ESI-MS of cRGD.
Figure S5 Western blot analysis of the expression of MMP-2 in SCC-7 cells and COS7 cells.
Figure S6 Cell viability of SCC-7 and COS7 after incubated with CPT (in DMSO).