

## SUPPLEMENTARY MATERIAL

### Melatonin Derivative-Conjugated Formulations of Pd(II) and Pt(II) Thiazoline Complexes on Mesoporous Silica to Enhance Cytotoxicity and Apoptosis against HeLa Cells

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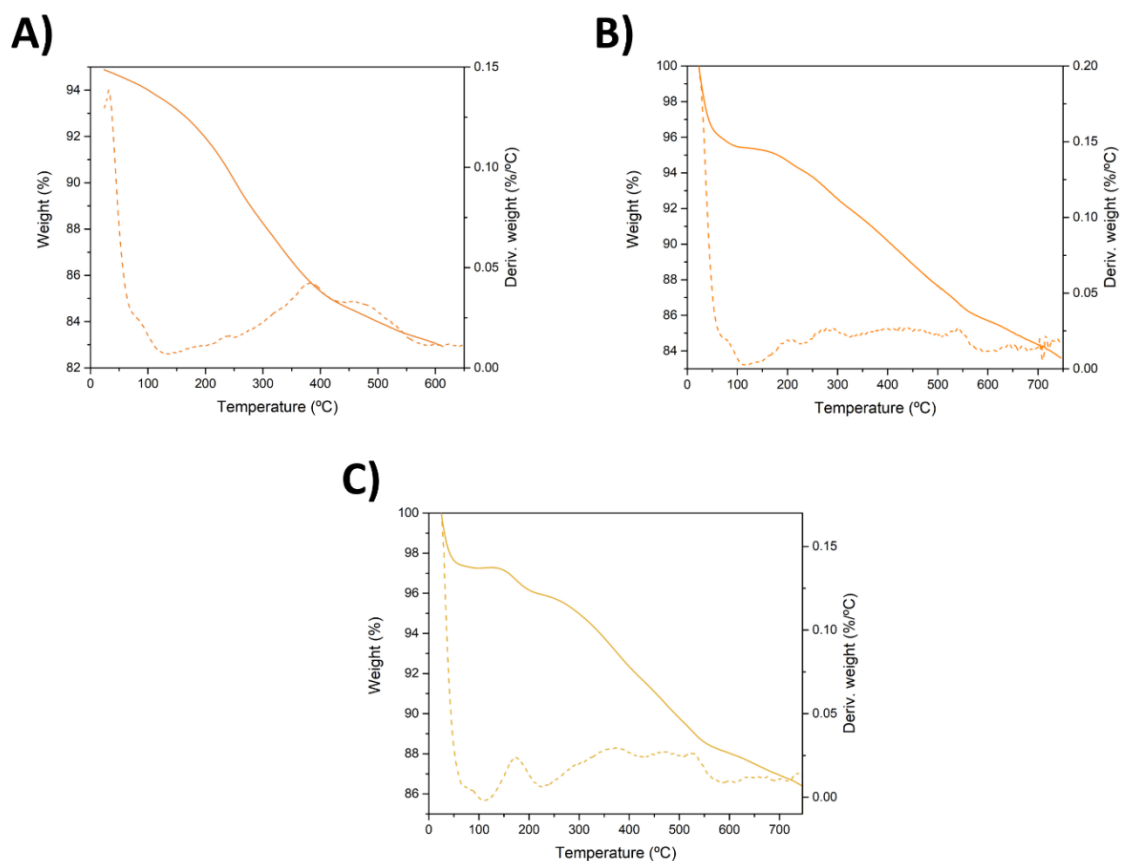
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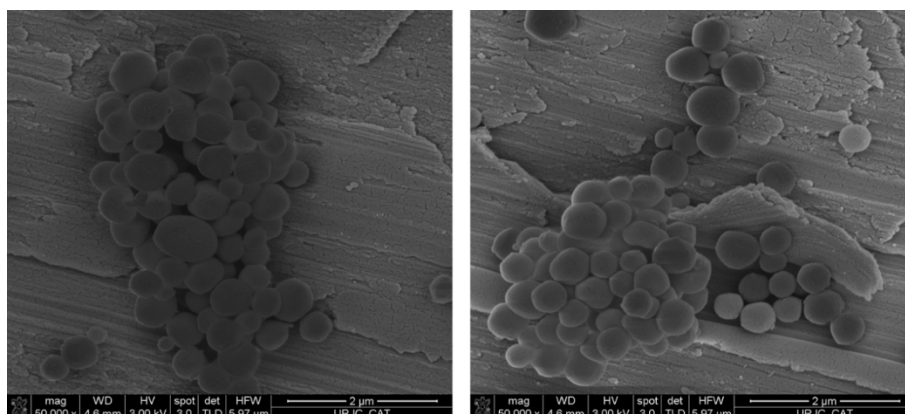
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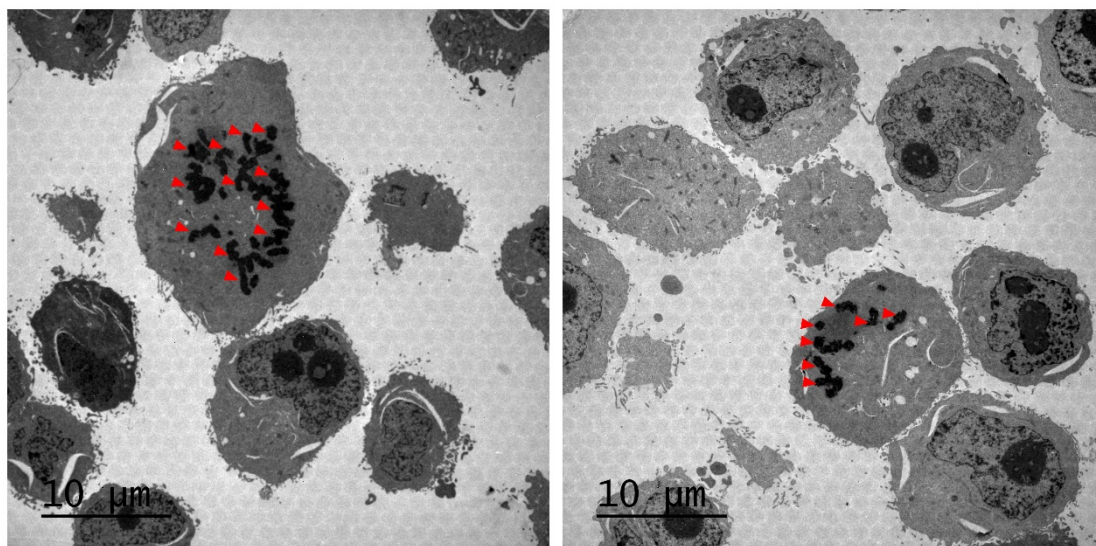
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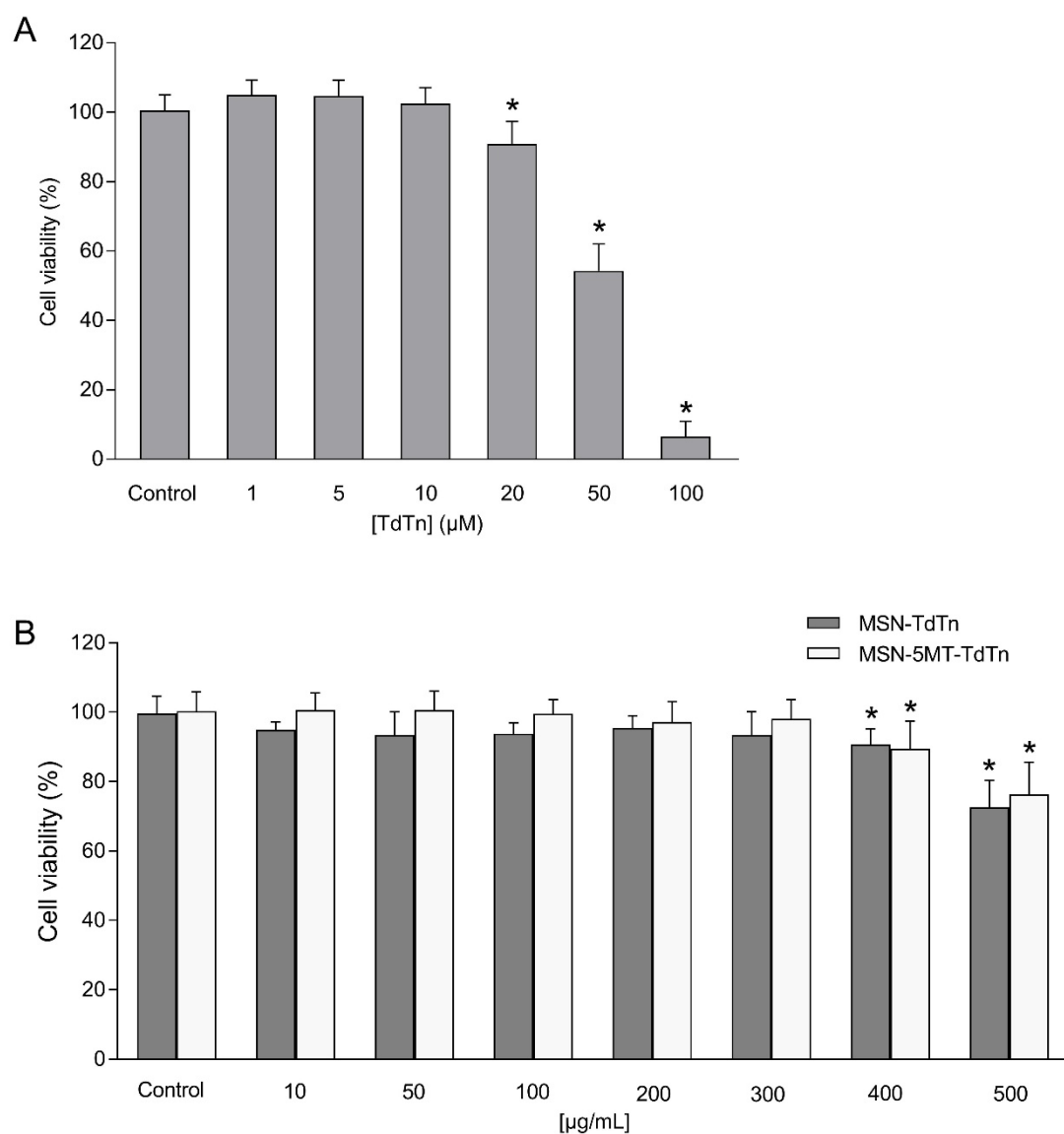
**Figure S1.** TG-DTG curves of MSN-TdTn (A), MSN-5MT (B) and MSN-5MT-TdTn (C).



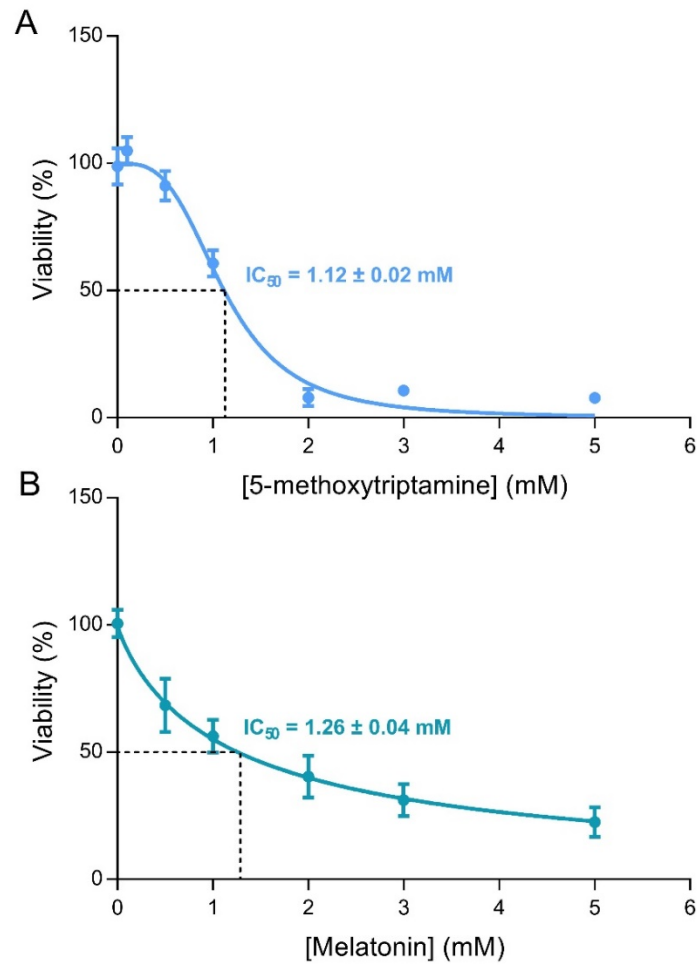
**Figure S2.** SEM micrographs of MSN material.



**Figure S3.** Representative TEM images of clusters of palladium-containing MSNs (red arrowheads) internalized in HeLa cells. Scale bar: 10  $\mu\text{m}$ .



**Figure S4.** Dose-response curve of MSN-TdTn, MSN-5MT-TdTn and the free ligand TdTn on cell viability. **A** HeLa cells were stimulated with increasing concentrations of free TdTn (1-100 μM; **A**), silica-based materials (10-500 μg/mL; **B**) or the vehicle (DMSO) for 24 hours. Values are presented as means ± SD of 5 separate experiments and expressed as percentage of control values. \* $P < 0.05$  compared to control values.



**Figure S5.** Kinetics of the dose-response curve of 5-methoxytryptamine (5MT) and melatonin. HeLa cells were stimulated with increasing concentrations (0.5, 1, 2, 3, and 5 mM) of 5MT (A) and melatonin (B), or the vehicle (DMSO) for 24 h. Values are presented as means  $\pm$  SD of 5 separate experiments and expressed as percentage of control values.  $IC_{50}$  values were calculated by fitting the curve using a four-parameter, sigmoid dose-response equation.