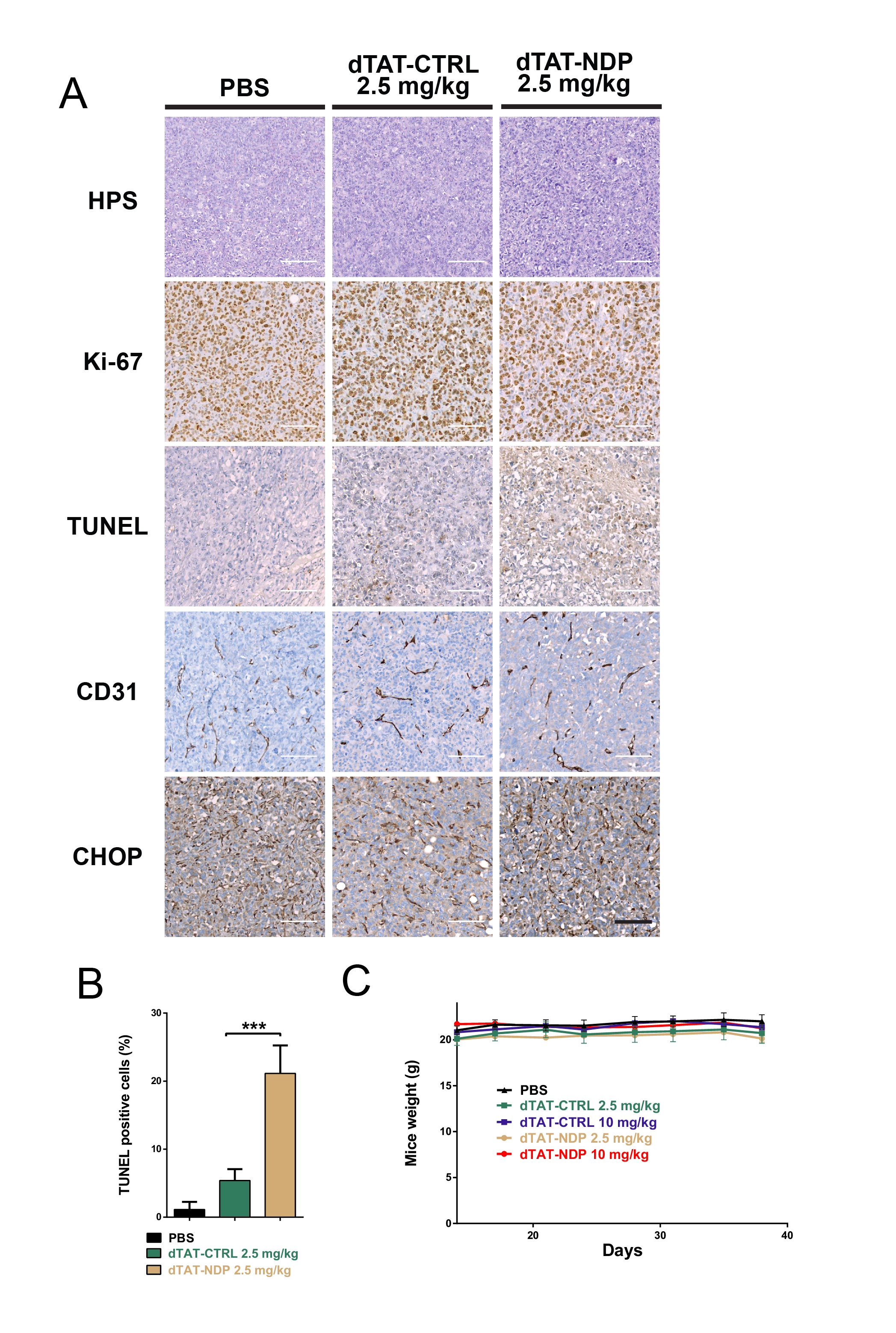


*Supplementary Figure 8 –* **Mechanism for irradiation-free dTAT peptide internalization**

Diagram presenting the protocol used to internalize dTAT peptide without the help of physical agents, such as light irradiation. For treatment with dTAT-NDP-TMR or dTAT-NDP-CTRL, cells were first seeded onto regular 6-well, 24-well or 96-well plates (Corning). Corresponding peptides were diluted to 10 μM in Ca2+-free balanced salt solution (BSS), from a 100 μM peptide stock solution in water prepared 24h prior experiment. Cells were incubated for 1h in the 10 μM peptide/BSS solution, and then washed and placed in regular medium before subsequent experiments.



*Supplementary Figure 9 –* **dTAT peptide treatment increases apoptosis of tumor cells *in vivo***

(**A**) Expression of Ki-67, TUNEL-positive apoptotic bodies, CD31-positive blood vessels and CHOP in representative tumor sections of mouse group treated by PBS, dTAT-CTRL or dTAT-NDP at 2.5 mg/kg. Hematoxylin staining is shown on top panels (HPS)*.* Representative tumor sections in non-necrotic area were processed for immunohistochemical detection of Ki-67 and CHOP to assess cell proliferation and UPR, respectively. Blood vessels were visualized via CD31. Cell death was detected by TUNEL assays. At least five randomly selected non-overlapping fields were examined. TUNEL signal was increased upon *nrh* silencing and Doxorubicin treatment. Mitotic index (Ki-67) and vessel density quantification (CD31/PECAM) showed no significant differences between groups. Scale bars: 100 μm. (**B**) Quantification of TUNEL positive cells in two different mouse tumors per conditions processed as described in (**A**), representing cell death levels (mean ± SD; *n* = 8 microscopic field, at least 100 cells per field; \*\*\*, P < 0.001). (**C**) Measurement of mouse weight over the course of the experiments shown in Figure 7C. Mice were weighted twice a week using a precision scale (mean ± SEM; *n* = 5 mice per condition) and did not show significative weight change at different dTAT peptide concentrations.