DIRECT INDUCTION OF APOPTOSIS USING AN OPTIMAL MITOCHONDRIALLY TARGETED P53

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Supporting Information

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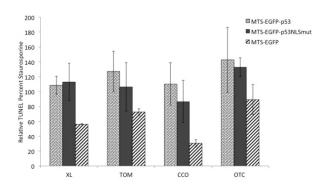


Figure S1. T47D cells were tested 48 hours following transfection. DNA fragmentation was analyzed with the TUNEL assay. All constructs were corrected to staurosporine positive control, which is set at 100%. Statistical analysis comparing MTS-EGFP-p53 NLS mutation to MTS-EGFP-p53 was performed by unpaired t-test.

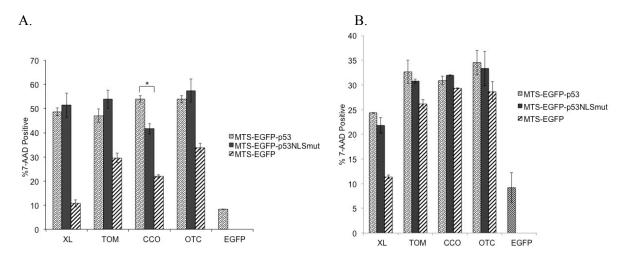


Figure S2. The 7-AAD assay was tested in (A) T47D and (B) MCF-7 cells 48 hours after transfection. Statistical analysis was performed by unpaired t-test. * p<0.05 for MTS-EGFP-p53 NLS mutation compared to its MTS-EGFP-p53. Except for CCO-EGFP-p53 NLS mutation in T47D cells all constructs with NLS mutation were not statistically significant from constructs without mutations. The T47D data is consistent with luciferase assay (Figure 3A) and pifithrin-α rescue experiment (Figure 8A).

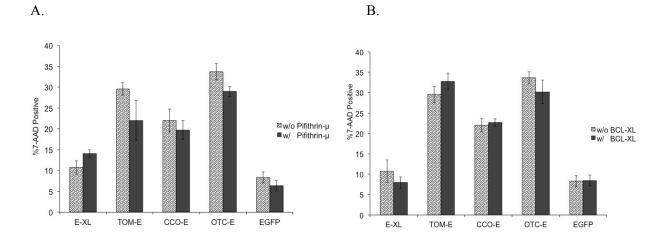


Figure 3. Rescue experiments using (A) pifithrin- μ , or (B) Bcl-XL. 7-AAD assay was performed 48 hours after transfection in T47D cells. Statistical analysis comparing treated (with pifithrin- μ , or Bcl-XL) to untreated (no drug or Bcl-XL added) was performed by unpaired t-test. Treated MTS-EGFP constructs were not statistically significant from untreated, indicating that the mitochondrial import machinery is not affected by pifithrin- μ nor Bcl-XL treatment.