Electronic Supplementary Material (ESI) for Biomaterials Science.

In vitro anticancer activity of AIEgens

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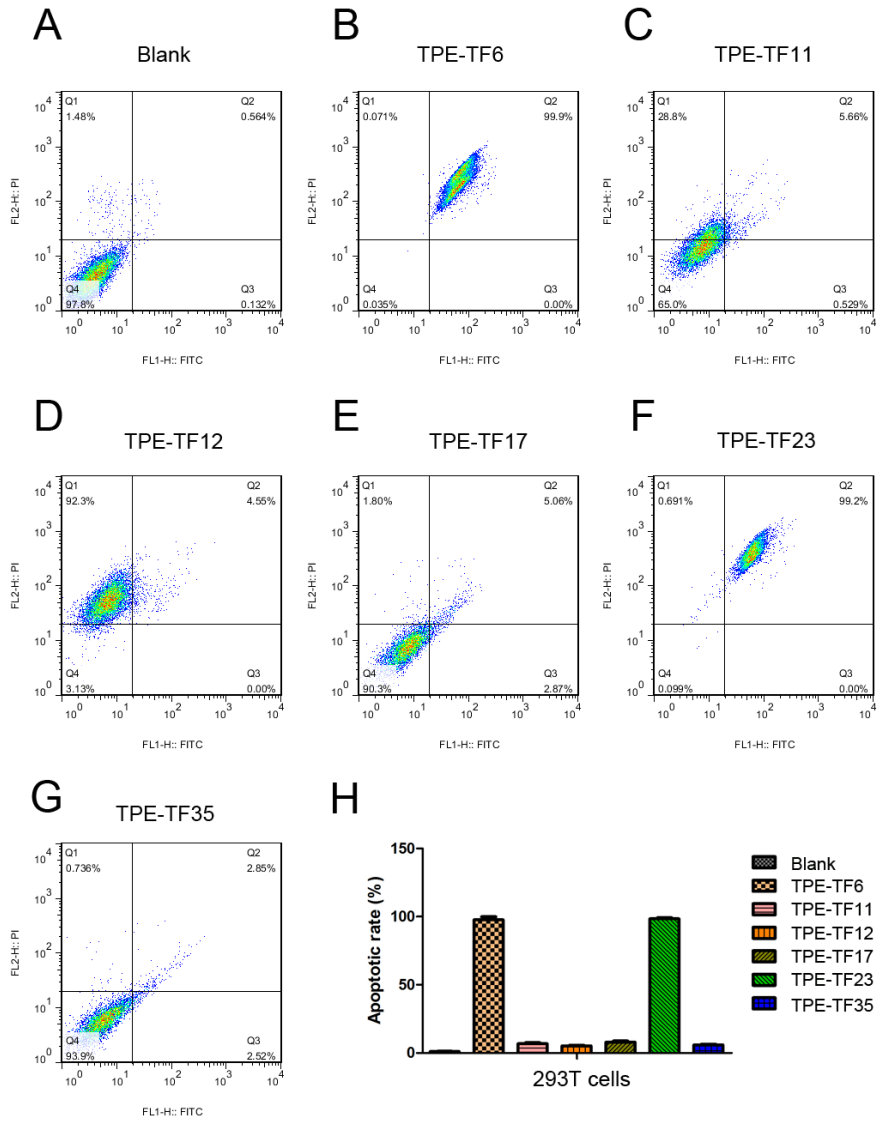

Figure S1 FITC-Annexin V and propidium iodide (PI) cell death assay of 293T cell lines after treatment with (A) Blank, (B) TPE-TF6, (C) TPE-TF11, (D) TPE-TF12, (E) TPE-TF17, (F) TPE-TF23, (G) TPE-TF35; (H) The number of apoptotic cells stained with Annexin V/PI for different treatment groups.

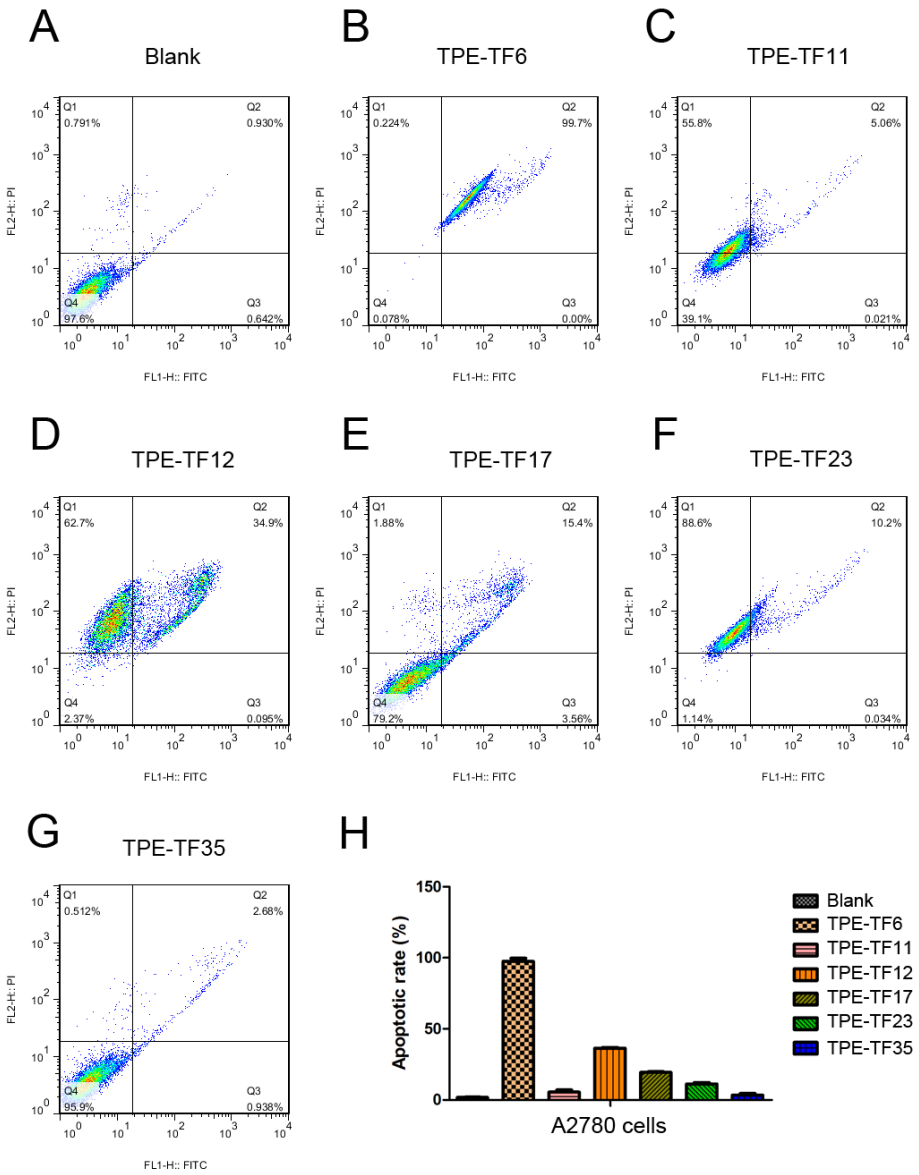

Figure S2 FITC-Annexin V and propidium iodide (PI) cell death assay of A2780 cell lines after treatment with (A) Blank, (B) TPE-TF6, (C) TPE-TF11, (D) TPE-TF12, (E) TPE-TF17, (F) TPE-TF23, (G) TPE-TF35; (H) The number of apoptotic cells stained with Annexin V/PI for different treatment groups.

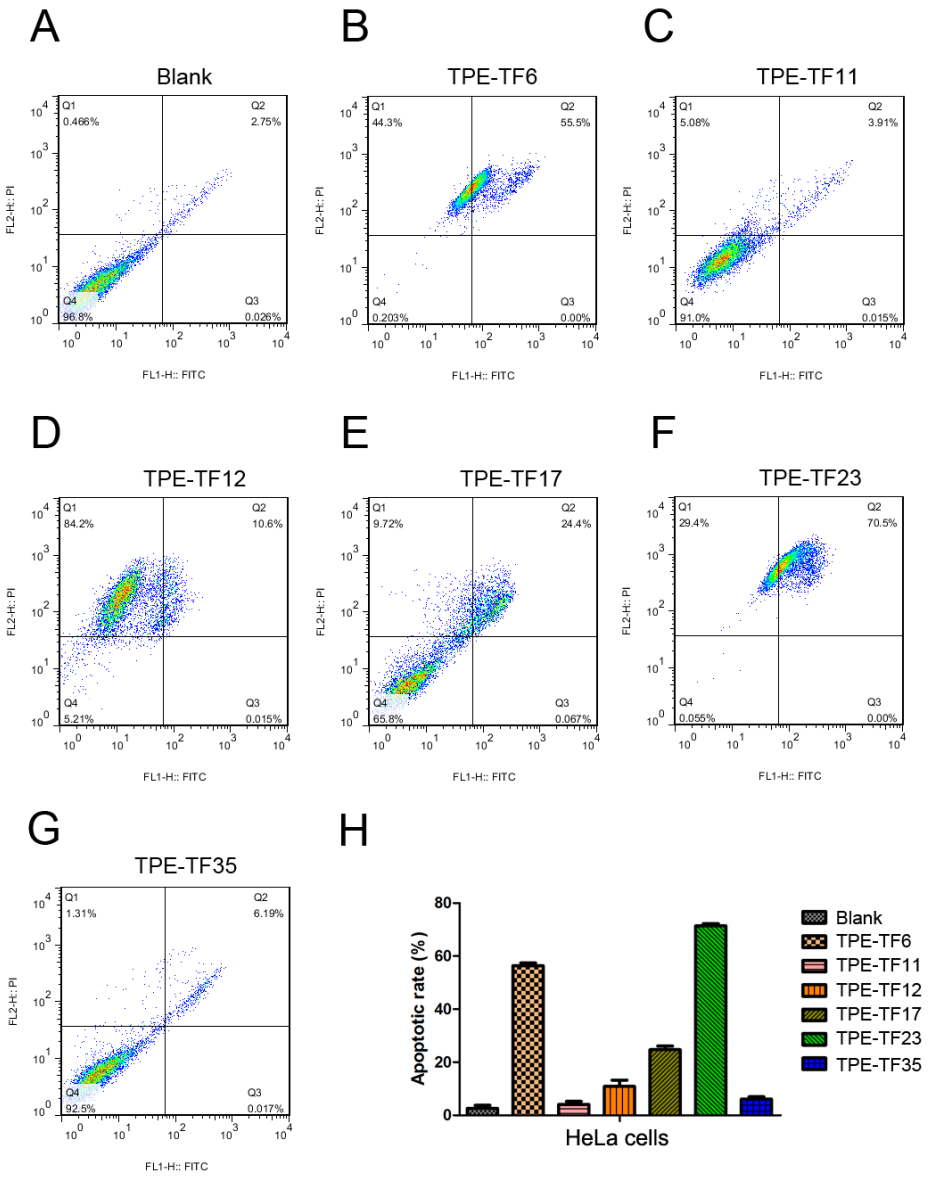

Figure S3 FITC-Annexin V and propidium iodide (PI) cell death assay of HeLa cell lines after treatment with (A) Blank, (B) TPE-TF6, (C) TPE-TF11, (D) TPE-TF12, (E) TPE-TF17, (F) TPE-TF23, (G) TPE-TF35; (H) The number of apoptotic cells stained with Annexin V/PI for different treatment groups.

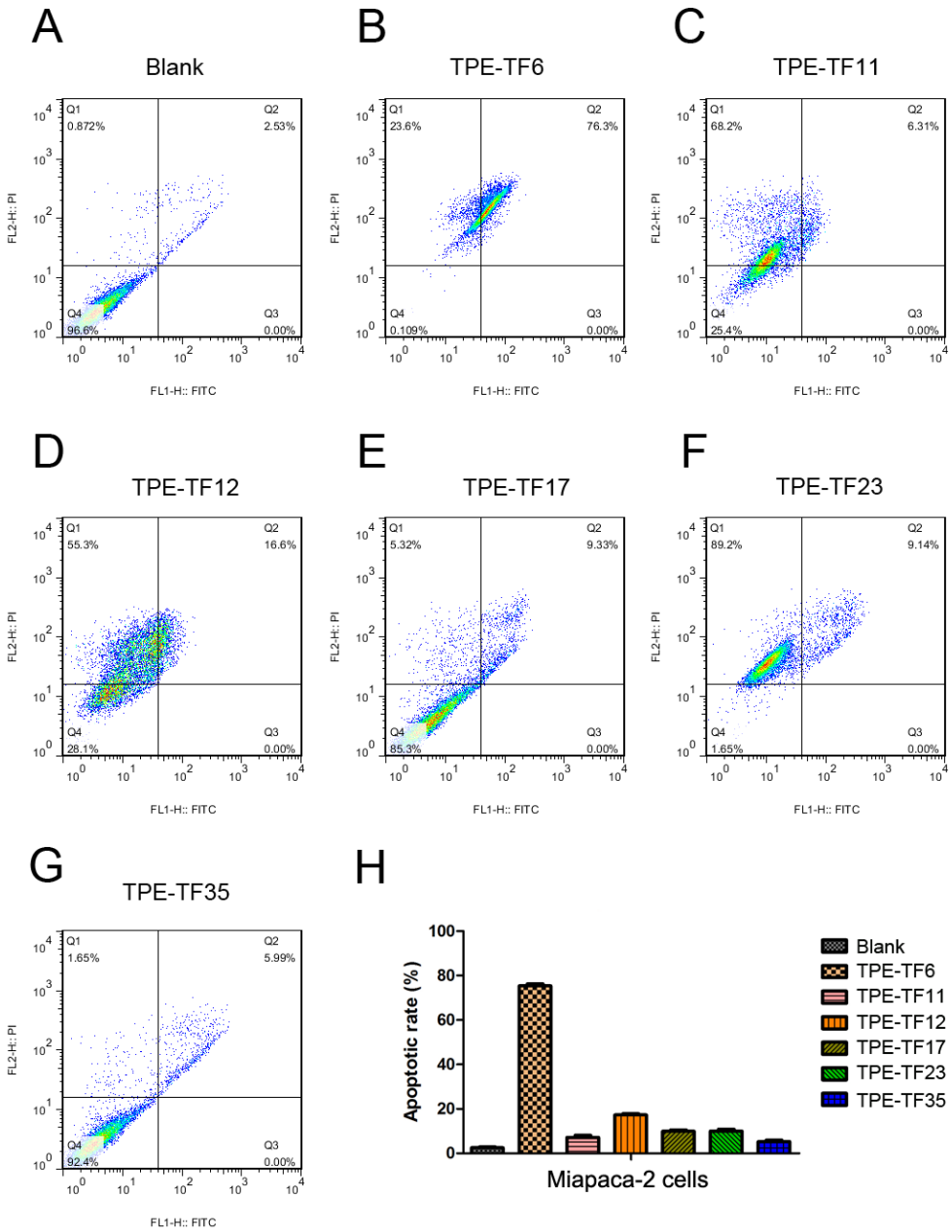

Figure S4 FITC-Annexin V and propidium iodide (PI) cell death assay of Miapaca-2 cell lines after treatment with (A) Blank, (B) TPE-TF6, (C) TPE-TF11, (D) TPE-TF12, (E) TPE-TF17, (F) TPE-TF23, (G) TPE-TF35; (H) The number of apoptotic cells stained with Annexin V/PI for different treatment groups.

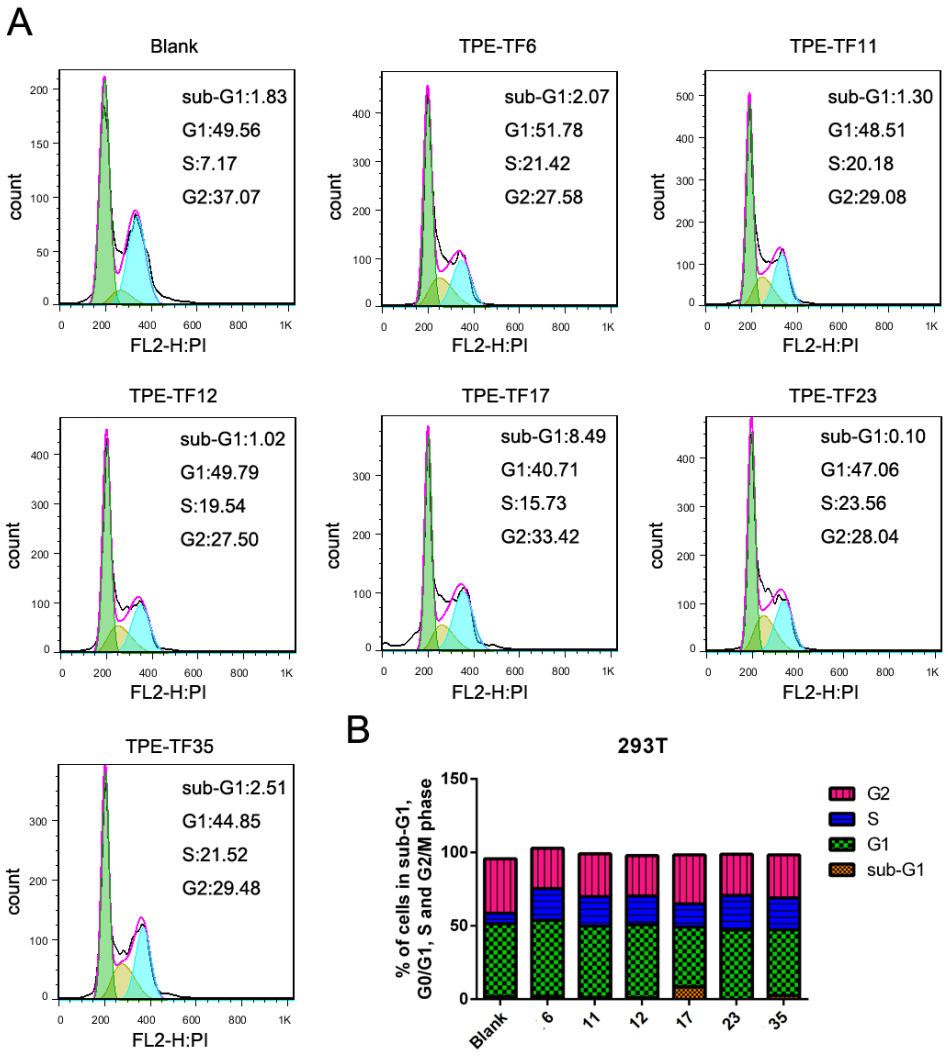

Figure S5. Cell cycle analysis of 293T cell line treated with different AIEgens and control group. (A) Representative images of flow cytometry analysis 24 hours after treatment. (B) Percentage of 293T cells in each mitotic phase after treatment with various AIEgens.

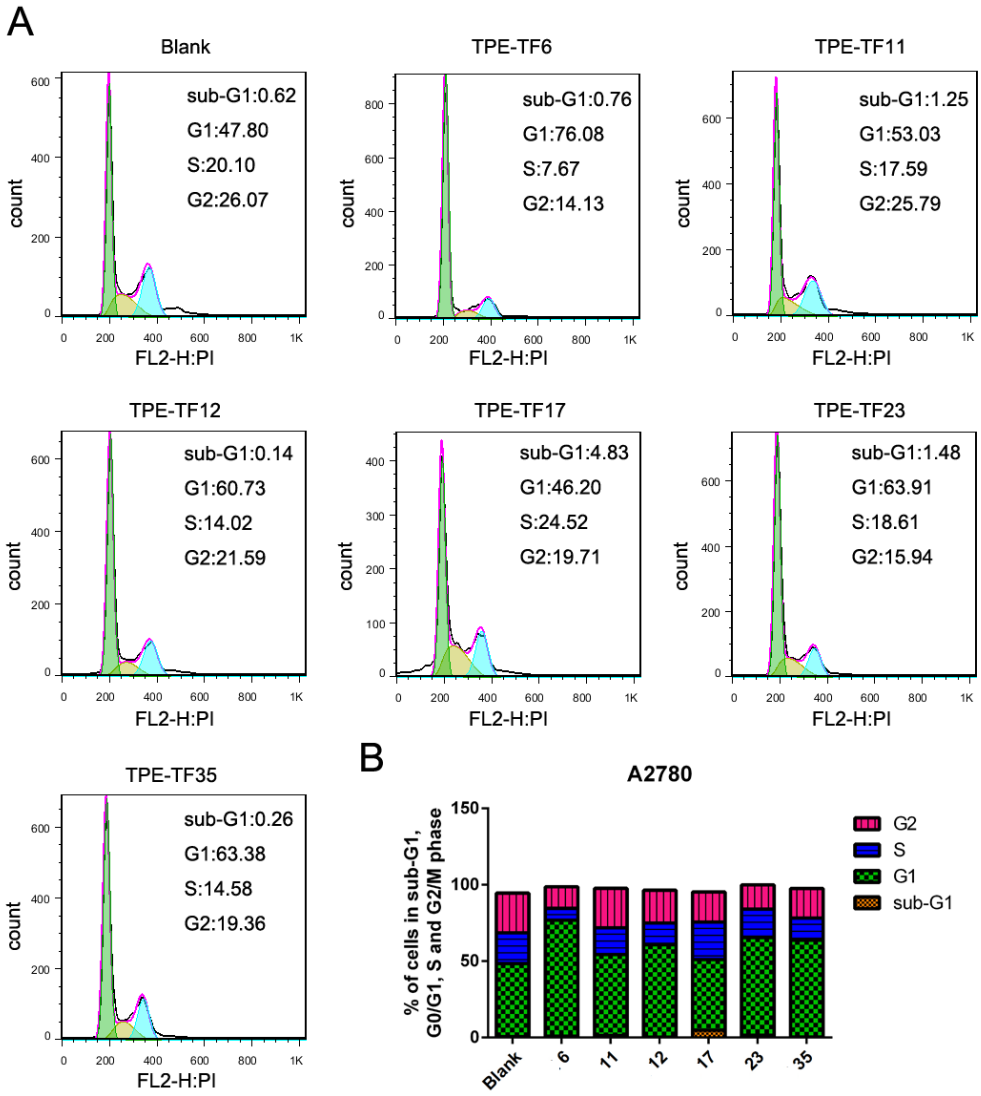

Figure S6. Cell cycle analysis of A2780 cell line treated with different AIEgens and control group. (A) Representative images of flow cytometry analysis 24 hours after treatment. (B) Percentage of A2780 cells in each mitotic phase after treatment with various AIEgens.

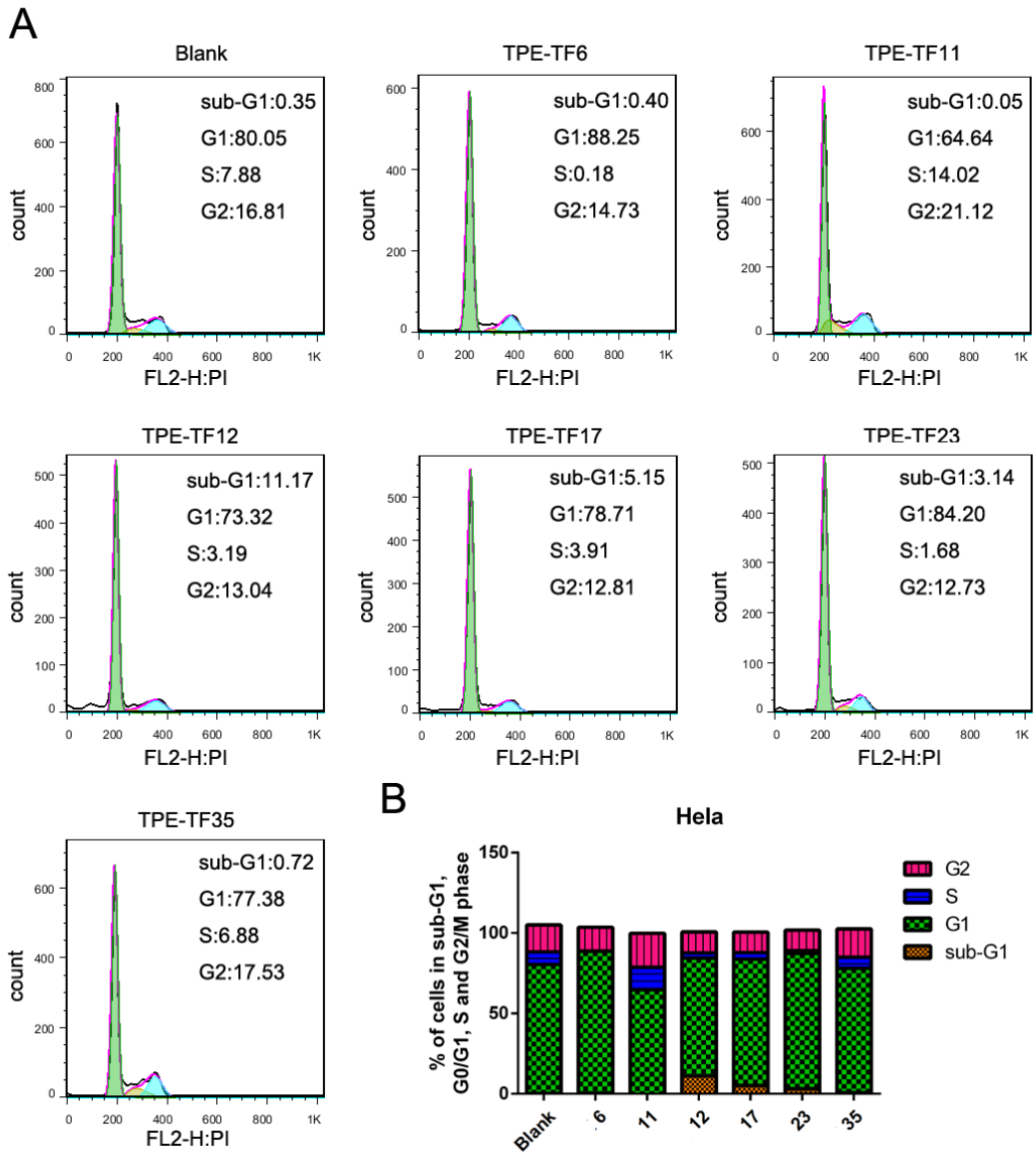

Figure S7. Cell cycle analysis of HeLa cell line treated with different AIEgens and control group. (A) Representative images of flow cytometry analysis 24 hours after treatment. (B) Percentage of HeLa cells in each mitotic phase after treatment with various AIEgens.

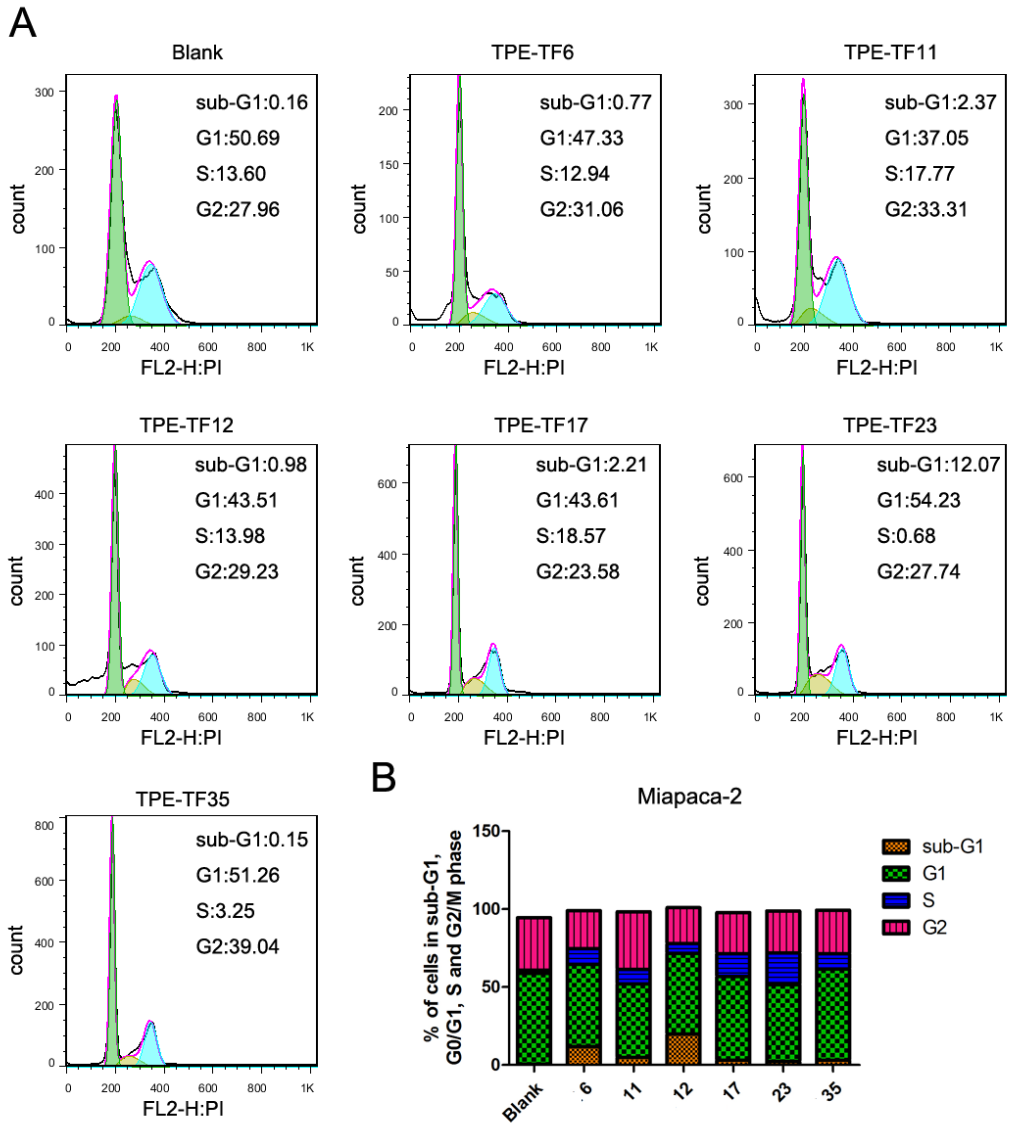

Figure S8. Cell cycle analysis of Miapaca-2 cell line treated with different AIEgens and control group. (A) Representative images of flow cytometry analysis 24 hours after treatment. (B) Percentage of Miapaca-2 cells in each mitotic phase after treatment with various AIEgens.

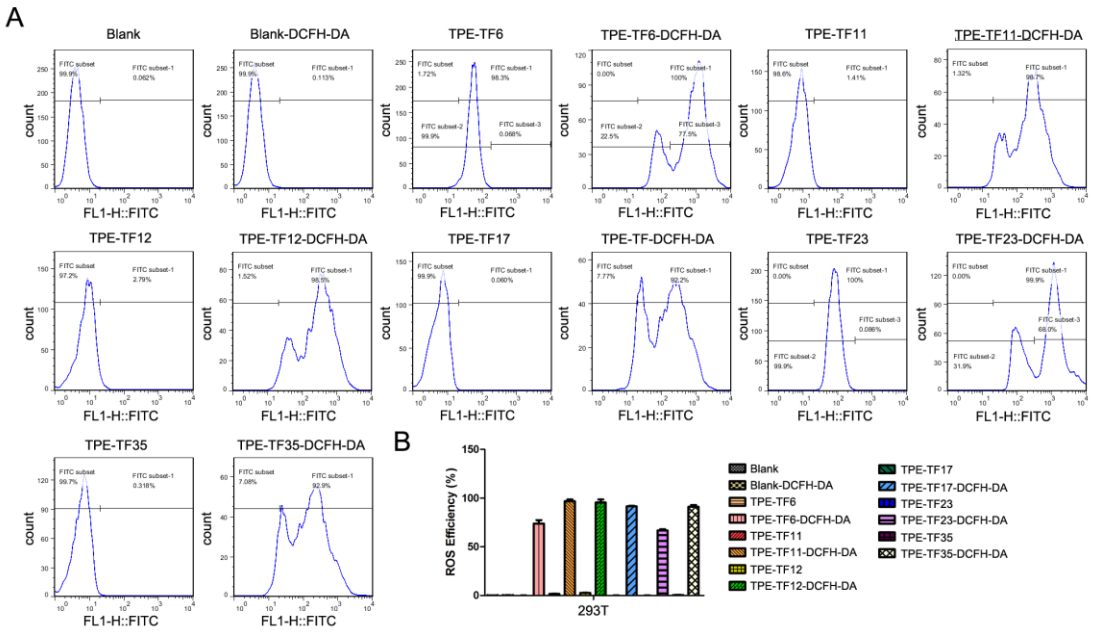

Figure S9. (A) The flow cytometer data of 293T cell lines incubated either with both AIEgens and DCF-DA or with DCF-DA alone, (B) ROS generation efficiency of AIEgens incubated with 293T cell line.

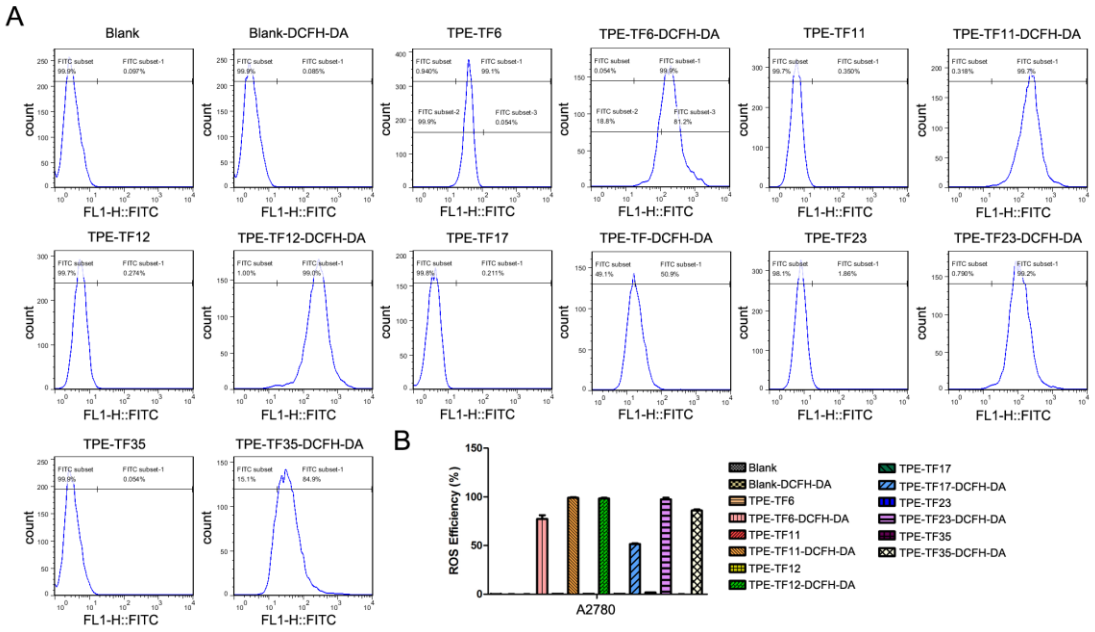

Figure S10. (A) The flow cytometer data of A2780 cell lines incubated either with both AIEgens and DCF-DA or with DCF-DA alone, (B) ROS generation efficiency of AIEgens incubated with A2780 cell line.

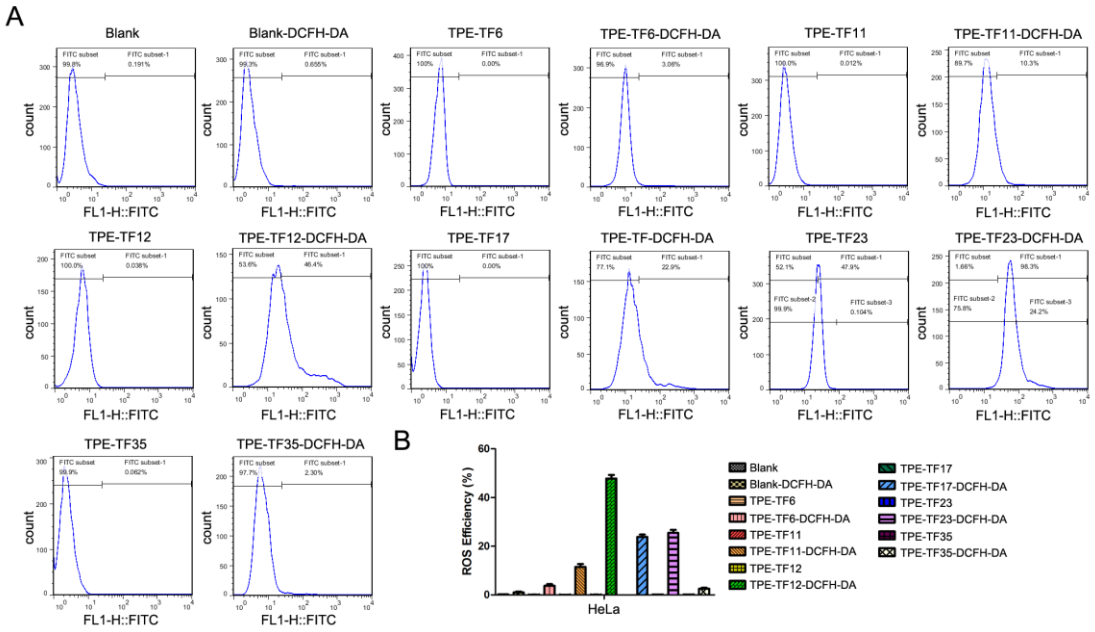

Figure S11. (A) The flow cytometer data of HeLa cell lines incubated either with both AIEgens and DCF-DA or with DCF-DA alone, (B) ROS generation efficiency of AIEgens incubated with HeLa cell line.

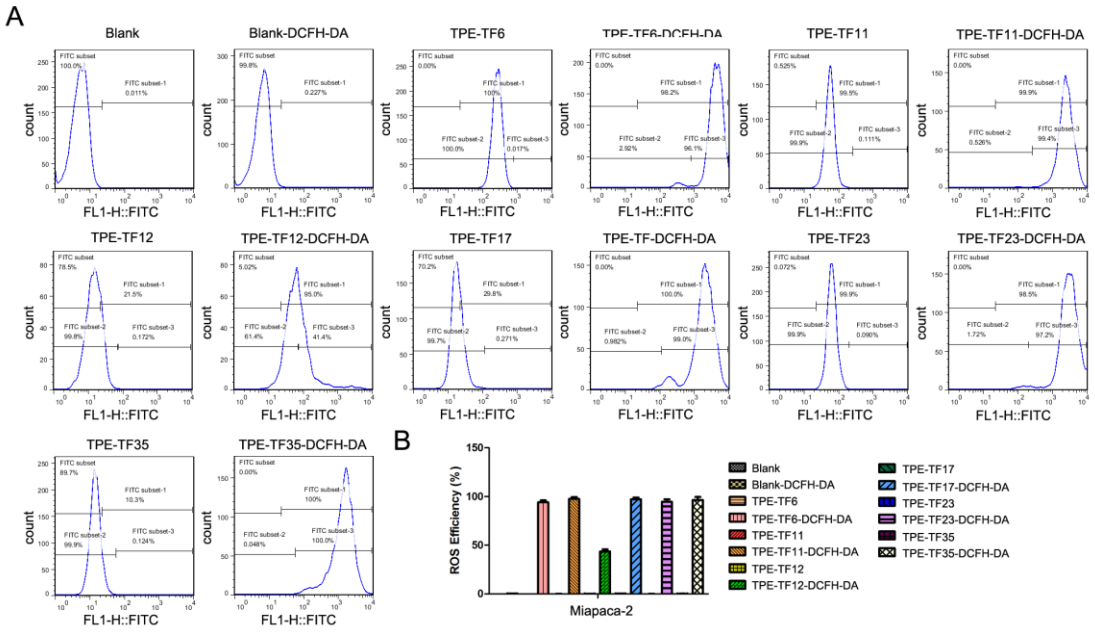

Figure S12 (A) The flow cytometer data of Miapaca-2 cell lines incubated either with both AIEgens and DCF-DA or with DCF-DA alone, (B) ROS generation efficiency of AIEgens incubated with Miapaca-2 cell line.