

Supplementary Information

A fluorescent light-up aggregation-induced emission probe for screening gefitinib sensitive non-small cell lung carcinoma

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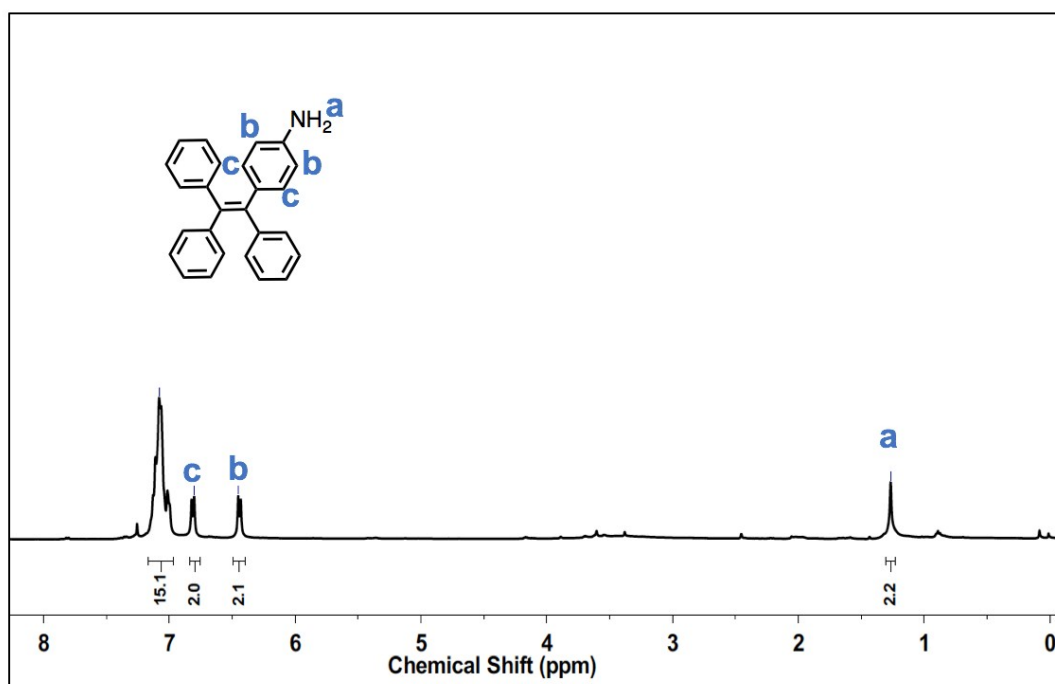


Fig. S1 ^1H NMR spectrum of TPE- NH_2 .

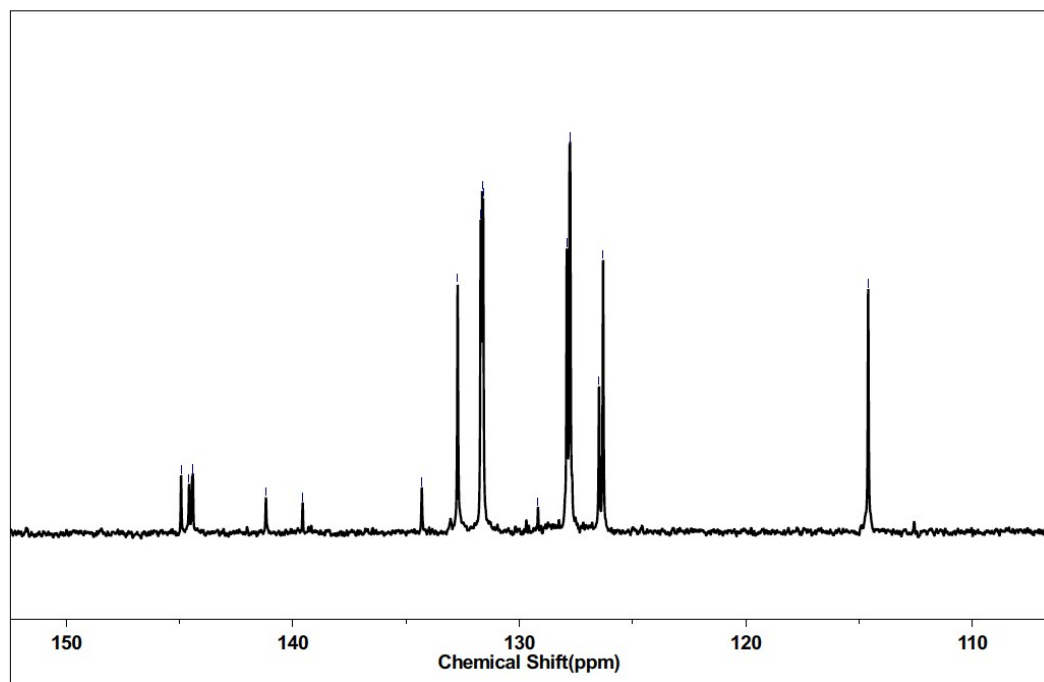


Fig. S2 ^{13}C NMR spectrum of TPE- NH_2 .

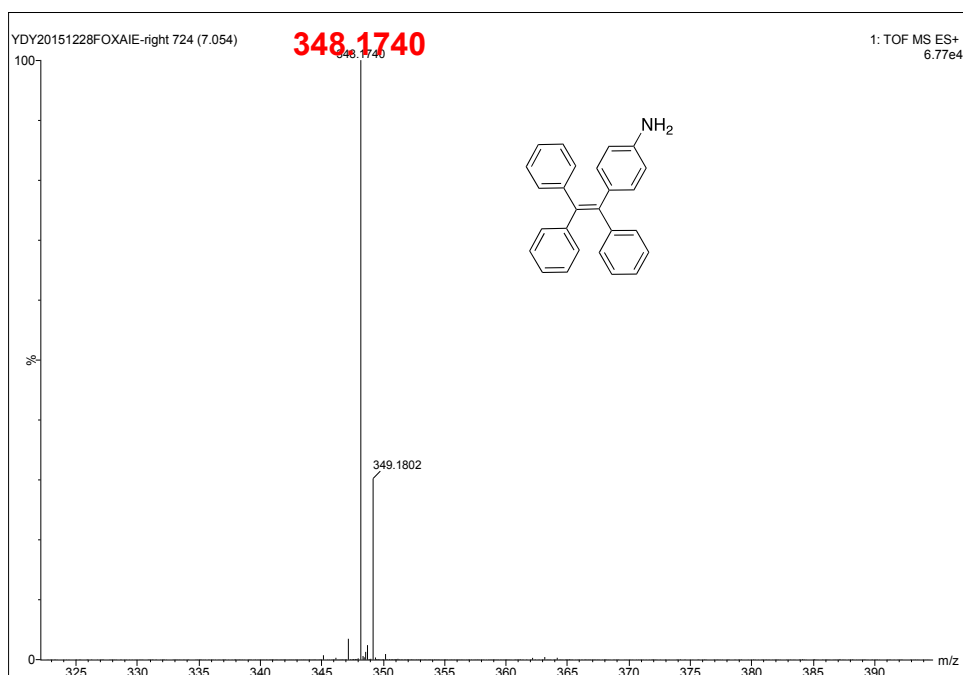


Fig. S3 Mass spectrum of TPE-NH₂. ESI-MS m/z: 348.1740 (calculated for [M]⁺: 348.1747).

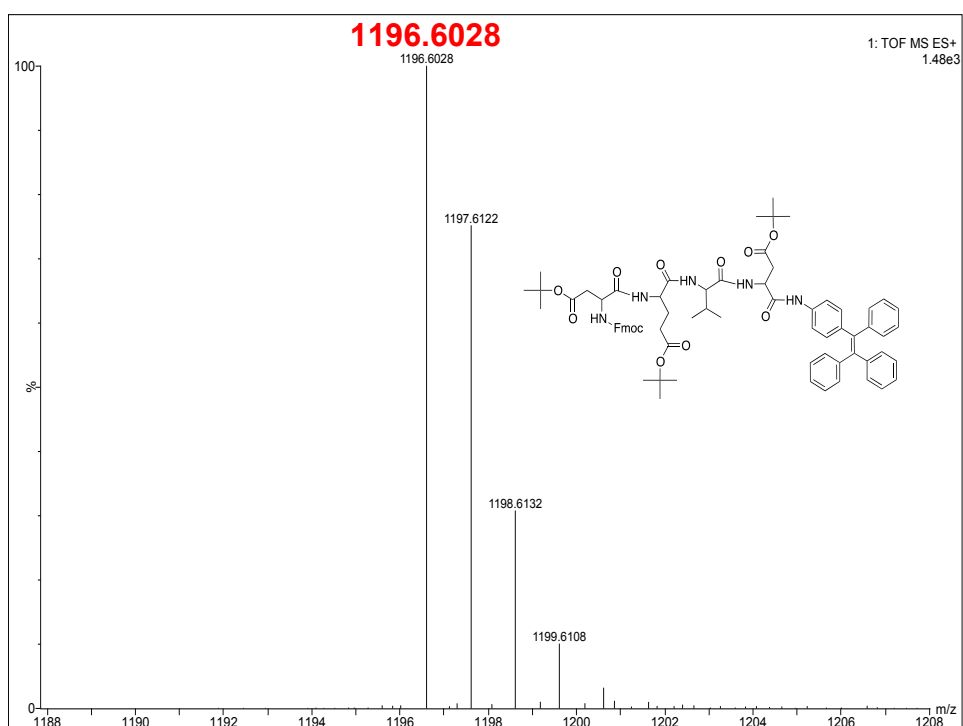


Fig. S4 Mass spectrum of (Fmoc)D(OtBu)E(OtBu)VD(OtBu)-TPE. ESI-MS m/z: 1196.6028 (calculated for [M]⁺: 1196.5955).

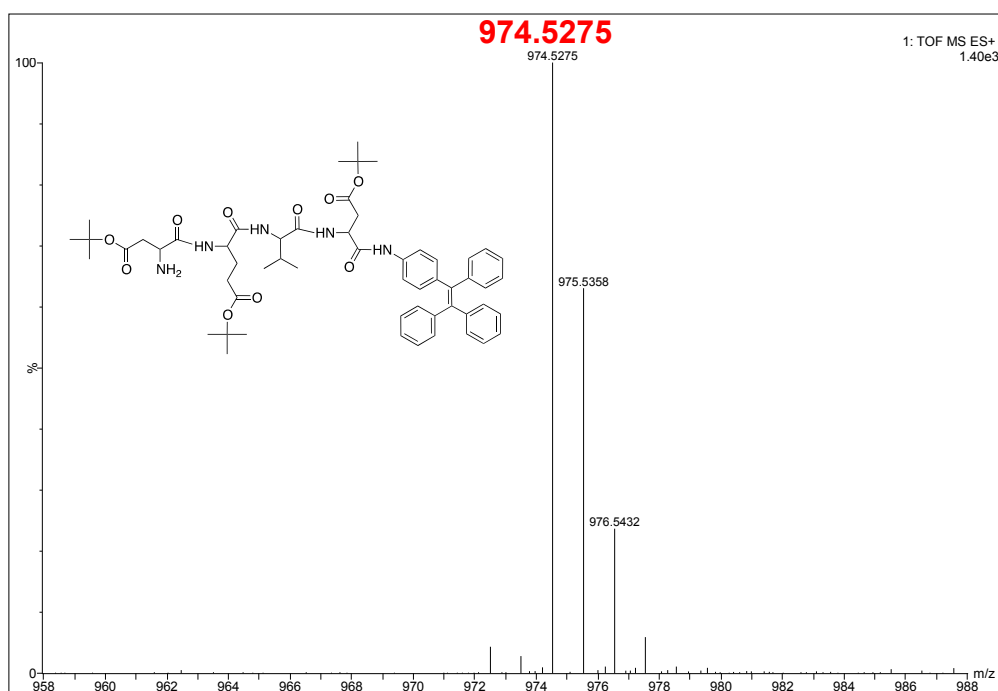


Fig. S5 Mass spectrum of D(OtBu)E(OtBu)VD(OtBu)-TPE. ESI-MS m/z: 974.5275 (calculated for $[M]^+$: 974.5274).

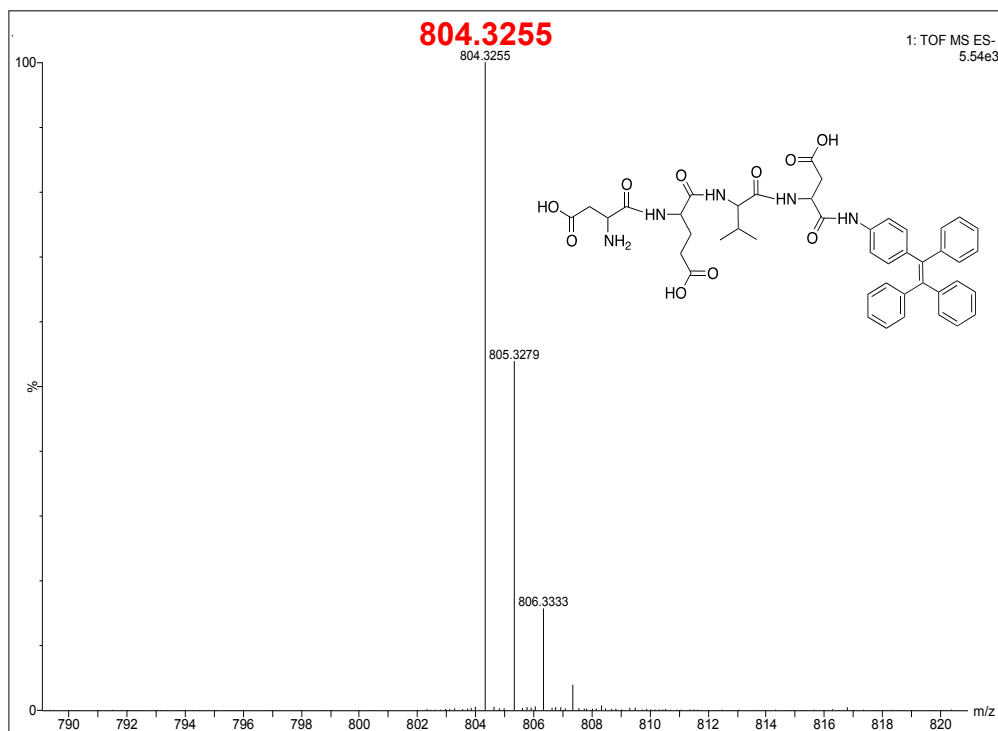


Fig. S6 Mass spectrum of DEVD-TPE. ESI-MS m/z: 804.5255 (calculated for $[M]^+$: 804.3250).

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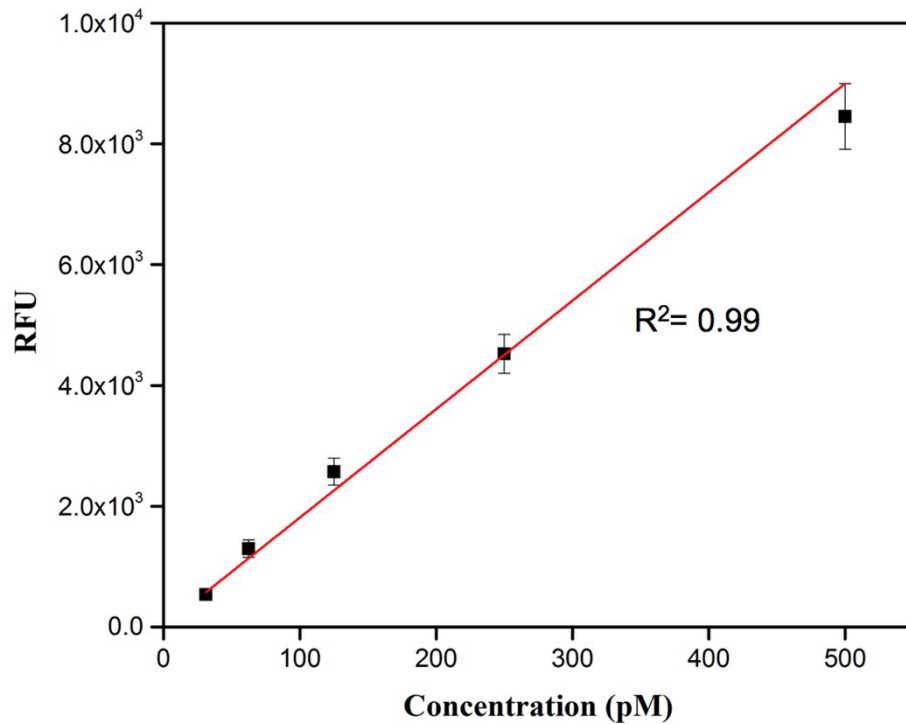


Fig. S7 The fluorescent intensity of DEVD-TPE (56.5 μ M) in a HEPES buffer (pH 8.0) upon incubated with caspase-3 (31.3 pM, 62.5 pM, 125 pM, 250 pM and 500 pM) for 30 min. The detection limit for caspase-3 was estimated to be 4 pM.

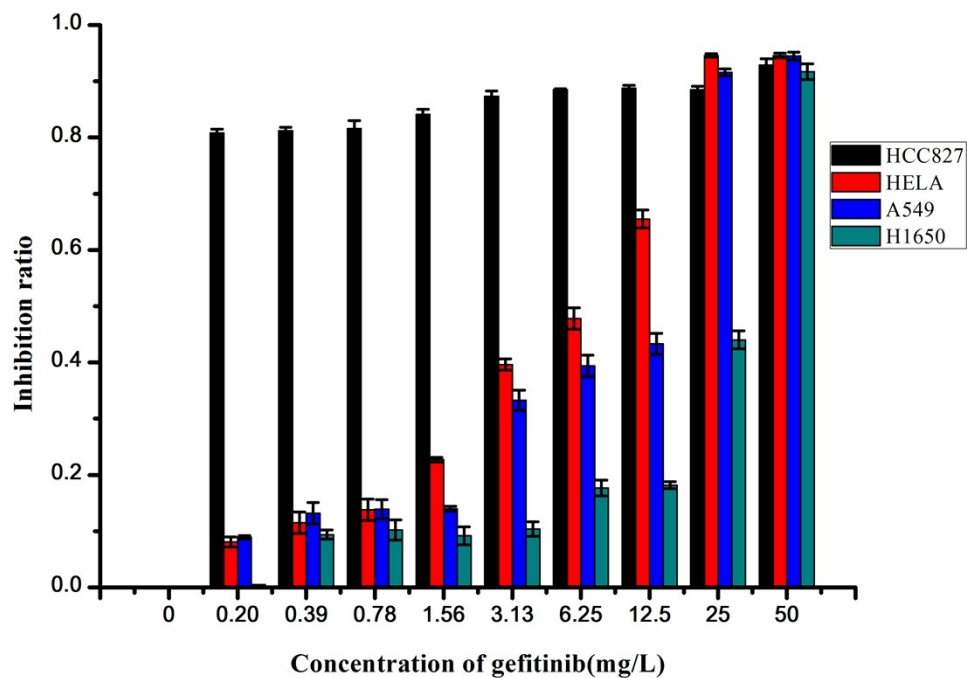


Fig. S8 Proliferation assay of HCC827 cells, HeLa cells, A549 cells and H1650 cells to gefitinib.

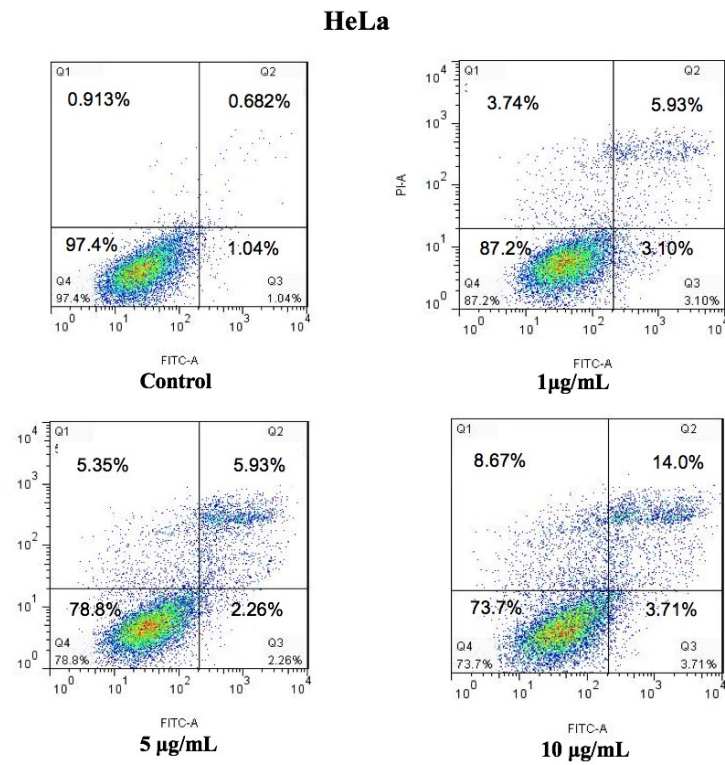


Fig. S9 Apoptosis assay of HeLa cells to gefitinib.

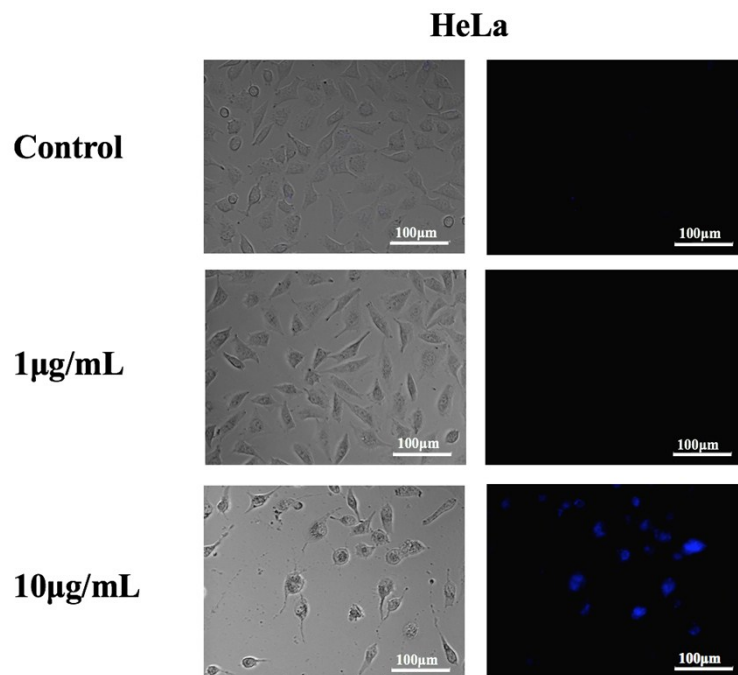


Fig. S10 Fluorescent images of HeLa cells upon treatment with gefitinib (1 $\mu\text{g/mL}$ and 10 $\mu\text{g/mL}$) for 24 h and DEVD-TPE (10 μM) for 1 h. All images share the same scale bar.

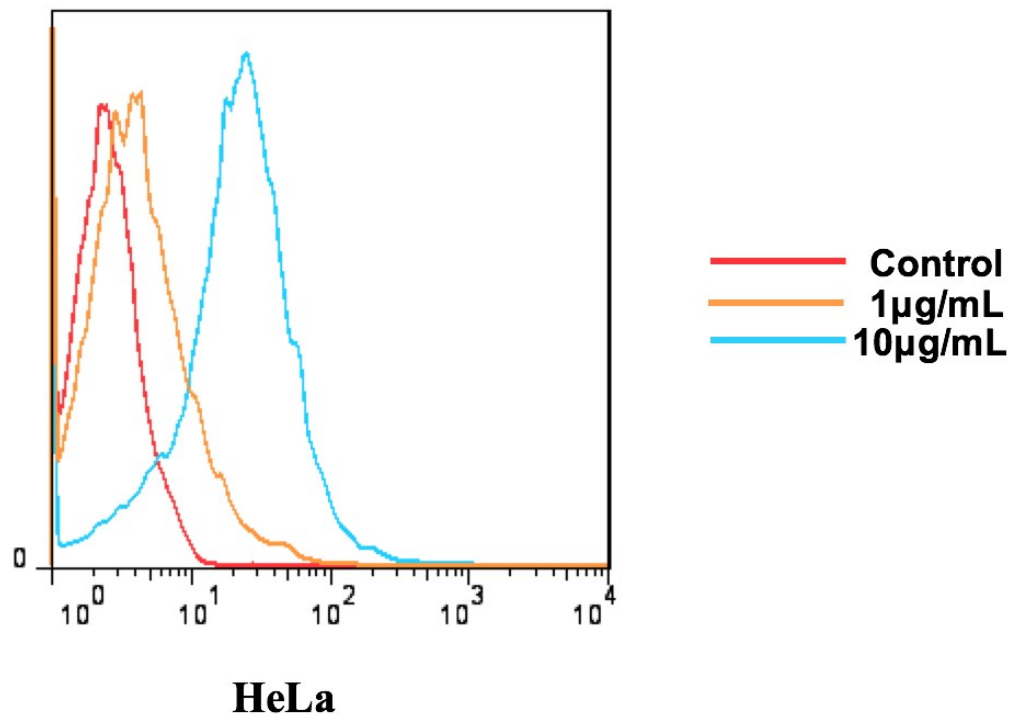


Fig. S11 Representative flow cytometry histogram profiles of HeLa cells cultured with vary concentration (1 µg/mL and 10 µg/mL) of gefitinib and stained by DEVD-TPE.

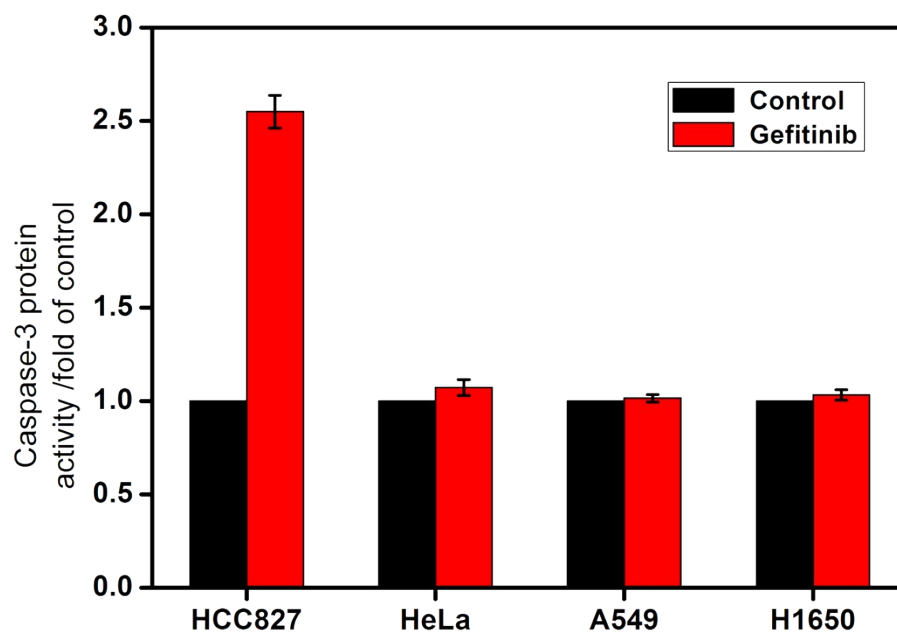


Fig. S12 Caspase-3 protein activity in HCC827 cells, HeLa cells, A549 cells and H1650 cells activated by gefitinib for 24 h at a concentrate of 1 µg/mL.