Supporting Information

Zeolitic Imidazolate Framework-8 (ZIF-8) as a Drug Delivery Vehicle for the Transport and Release of Telomerase Inhibitor BIBR 1532

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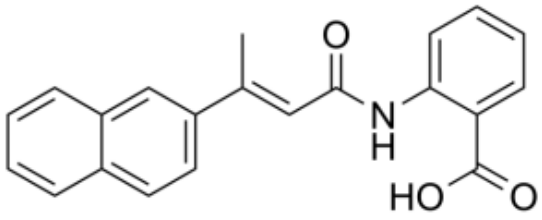

Figure S1. The structure of BIBR 1532.

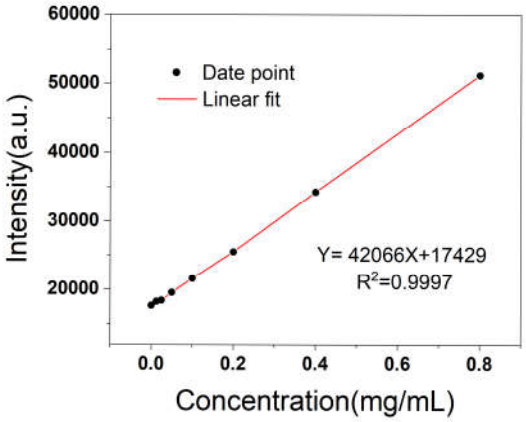

Figure S2. Plot of the standard curve. Fluorescence intensity values were plotted as functions of 6-AF@BIBR 1532 concentrations.

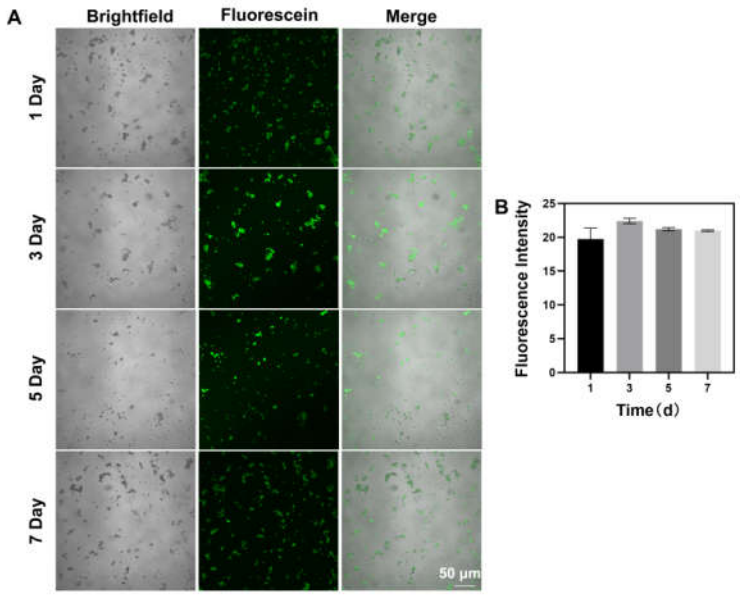

Figure S3. Fluorescence stability of fluorescein@ZIF-8. (**A**) Fluorescence signals of fluorescein@ZIF-8 detected at 1, 3, 5 and 7 days. (**B**) Quantitative analysis of fluorescence intensity using Image J.

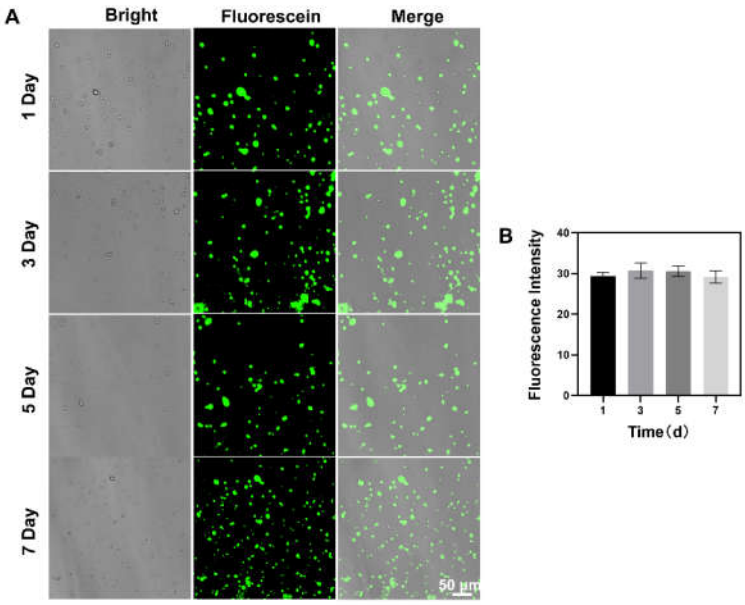

Figure S4. Fluorescence stability of 6-AF@BIBR 1532@ZIF-8. (**A**) Fluorescence signals of 6-AF@BIBR 1532@ZIF-8 detected at 1, 3, 5 and 7 days. (**B**) Quantitative analysis of fluorescence intensity using Image J.

Table S1. A summary of the similarities and differences between our present study and others' study ([78])

Similarities	Differences
Starting point: BIBR 1532 has a hydrophobic structure and is insoluble in water; **The role of the carrier:** Acid-sensitive chemical bond releasing drugs; The carrier allowed lysosomal escape of the drugs;	**Key observations:** Our: the release of BIBR 1532 from ZIF-8; efficacy comparison of BIBR 1532 with or without ZIF-8 as a drug vector in aspect of proliferation, cell cycle and cellular senescence of tumor cells; Others': the release of BIBR 1532 from PEG layer; the effect of telomerase inhibition by BIBR 1532 on DOX resistance reversal; **Drug release:** Our: pH-sensitive ZIF-8 helps release BIBR 1532; Others': redox-sensitive PEG layer actualizes BIBR 1532 release; **Functions of BIBR 1532:** Our: BIBR 1532 inhibits tumor cell proliferation, induces cell cycle arrest and promote cellular senescence of tumor cells; Others': BIBR 1532 weakens mitochondria protection and enhances ROS production and meanwhile promotes drug resistance tumor cell apoptosis; **The significance of the experiment:** Our: Improve the bioavailability of BIBR 1532 and enhance its biological effects; Others': Stable loading of BIBR 1532 to build a telomerase-termination nanoplatform for DOX resistance reversal;