

Electronic Supplementary Information

Utilization of a PNA-peptide Conjugate to Induce a Cancer Protease-Responsive RNAi Effect

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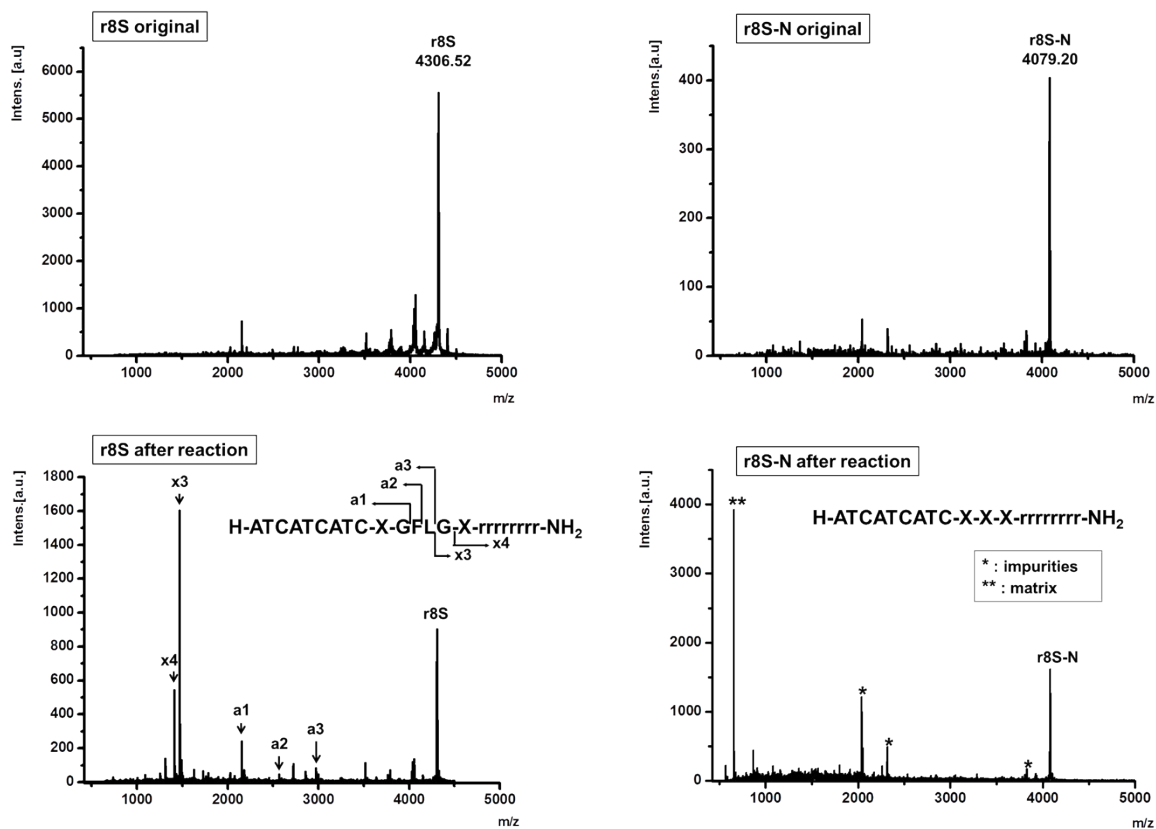


Fig. S1 Analysis of r8S and r8S-N before and after reaction with cathepsin B by MALDI-TOF mass spectrometry

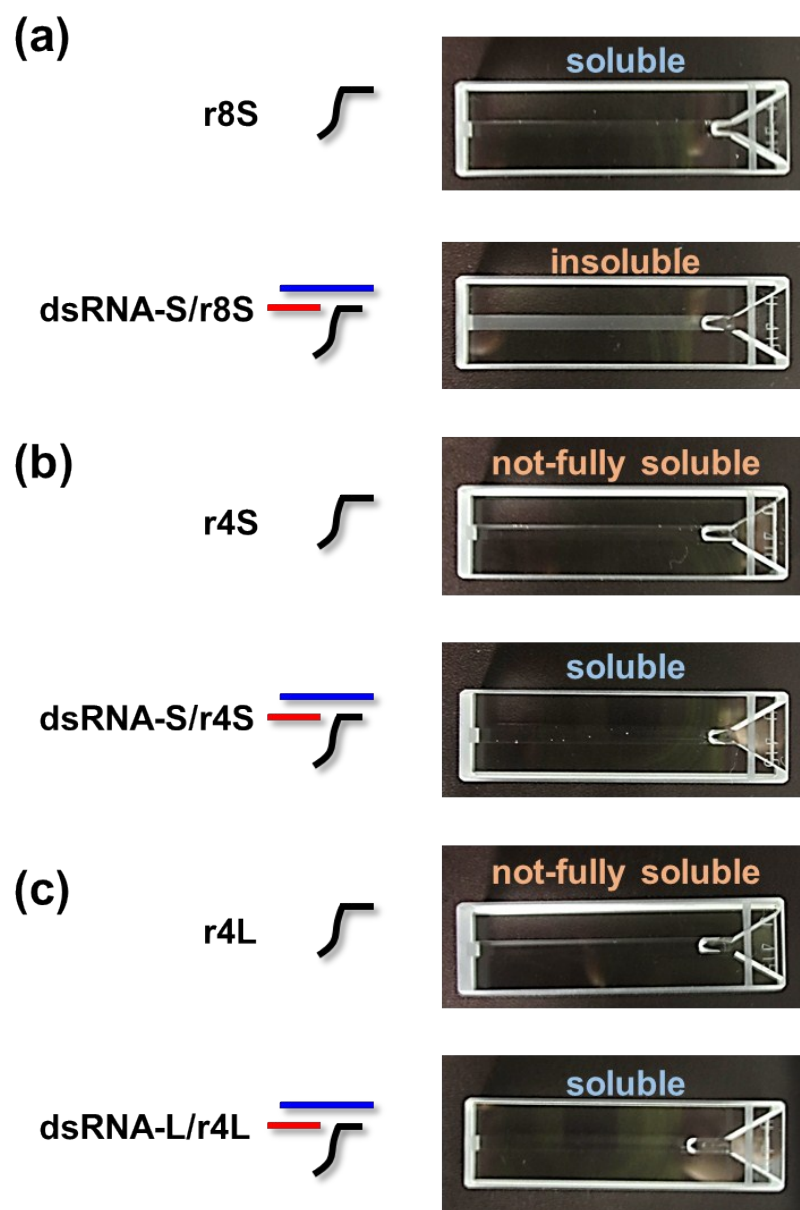


Fig. S2 Solubility of three kinds of PNA-peptide and their hybrid with dsRNA in PBS. Concentration of PNA-peptide and dsRNA is 3 μ M, respectively.

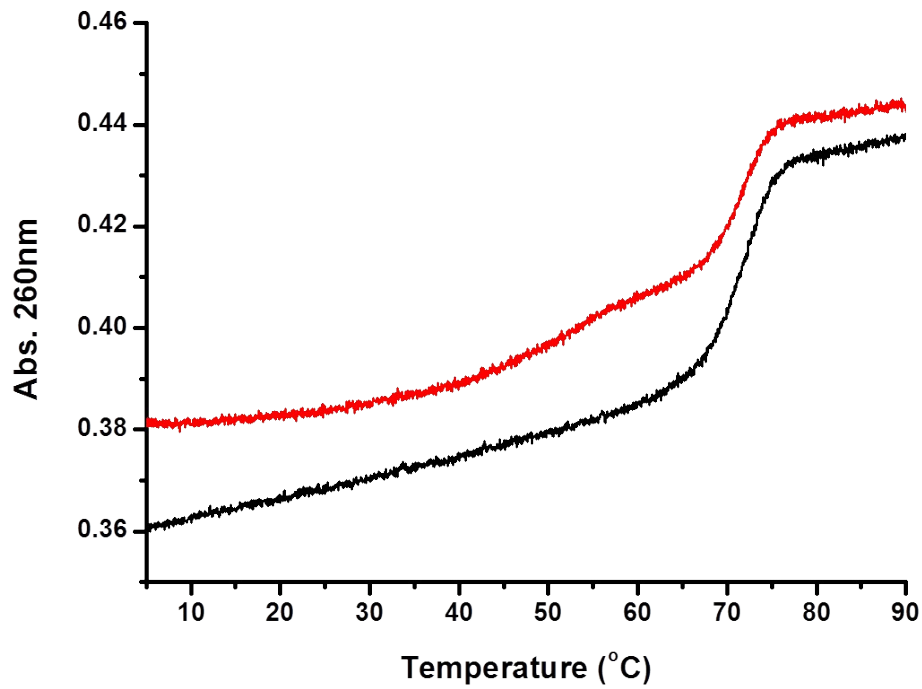


Fig. S3 Melting curve of dsRNA (black line) and dsRNA/r4L hybrid (red line) in PBS.

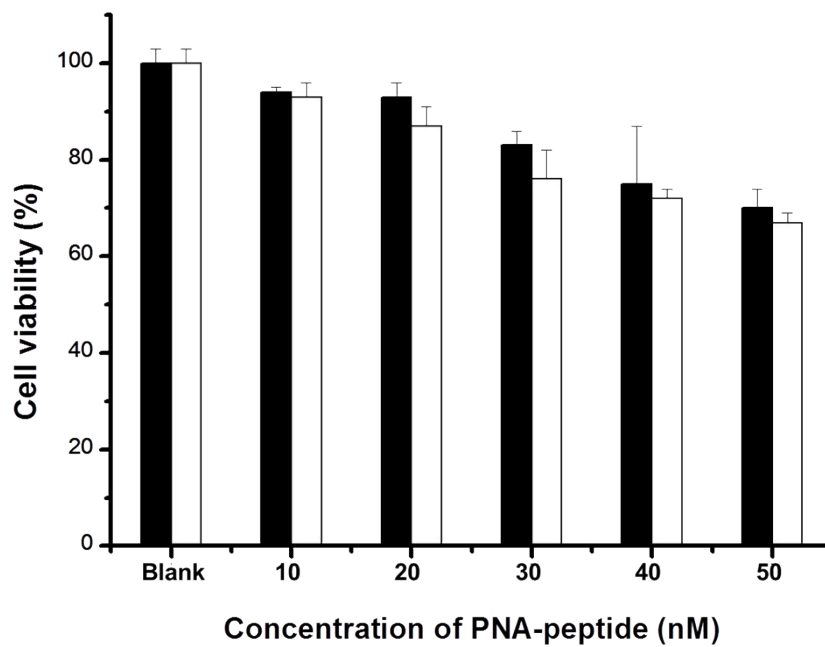


Fig. S4 Cytotoxicity of PNA-peptide against CT-26 in the absence (filled bar) or the presence of Lipofectamine 2000 (open bar).

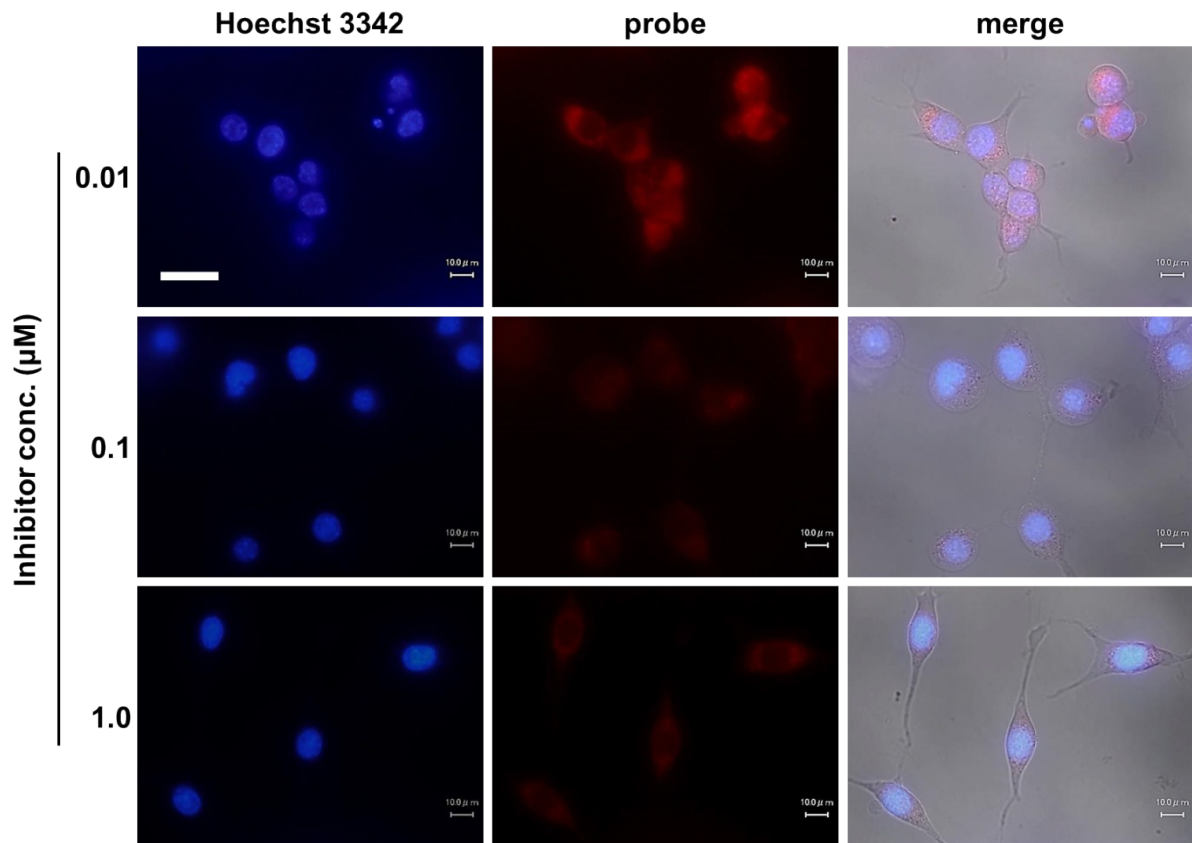


Fig. S5 Inhibition of cathepsin B in CT-26 cells by inhibitor (CA-074 Me). Inhibitory activity was detected by fluorescent cathepsin B probe (Magic red cathepsin B substrate). The scale bar is 20 μm. Cells were treated with CA-074 Me (0.01, 0.1, 1.0 μM) for 3 h then incubated with the probe for 1 h.