aSupporting Information of

Functionalized carbon nanotubes as transporters for antisense oligodeoxynucleotides

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Tab. S1. Elemental distribution (%) of p-MWCNT and MWCNT-f-OH measured by XPS.

	C	**N**	**O**
p-MWCNT	98,2	0	1,8
MWCNT-f-OH	89,5	3,2	7,3

Tab. S2. Design of synthetic oligodeoxynucleotides[23] which were additionally used for cell culture experiments whereas NS-K1 is used as nonsense control.

Type	**sequence**
NS-K1	5'-GTA AGC TGT TCT ATG TGT TC-3'
VEGF-857	5'-AGG GAC CGT GCT GGG TCA CC-3'
VEGF-859	5'-AGA GGG ACC GTG CTG GGT CA-3'

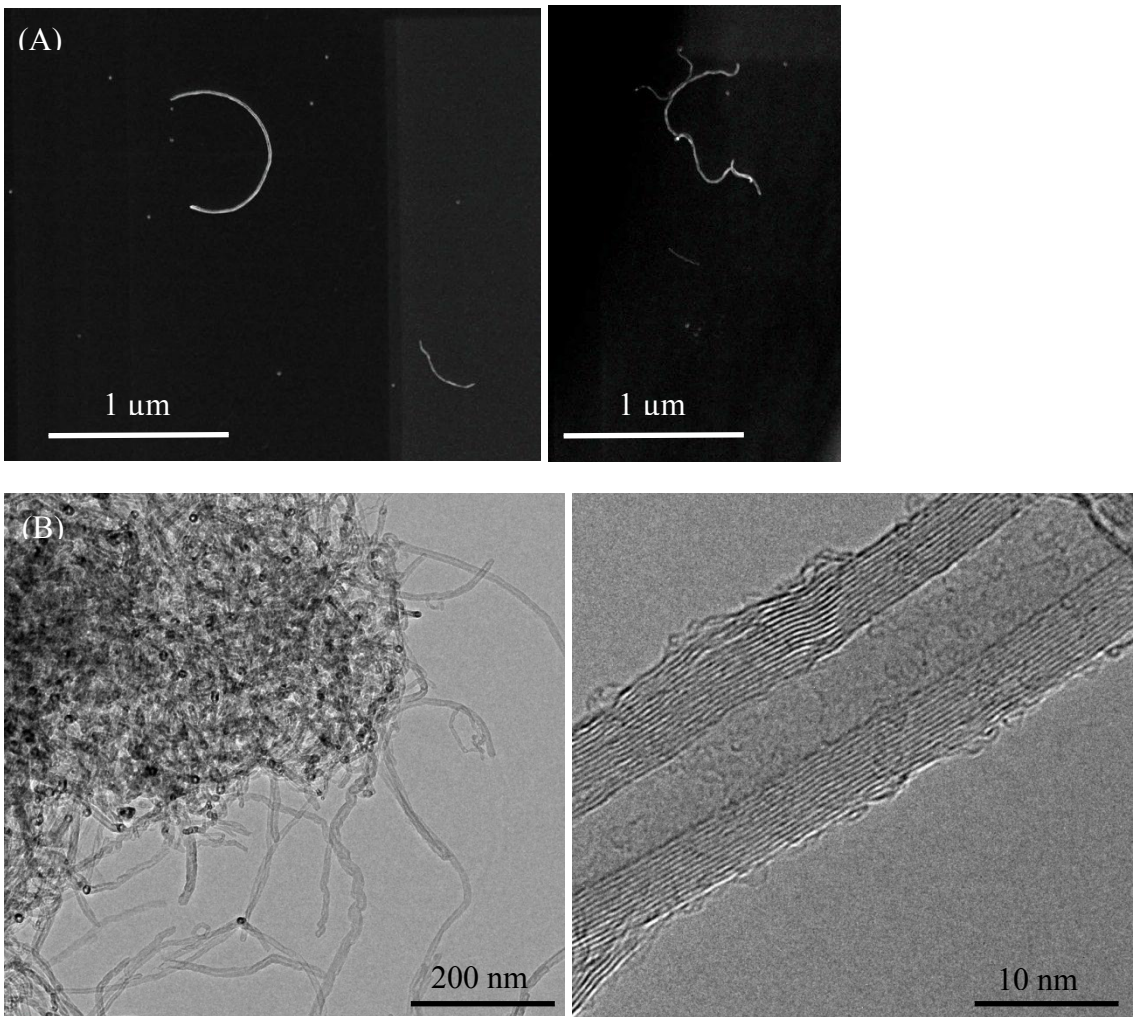

Fig.S1. Morphology of p-MWCNTs analyzed by SEM (A) and TEM (B).

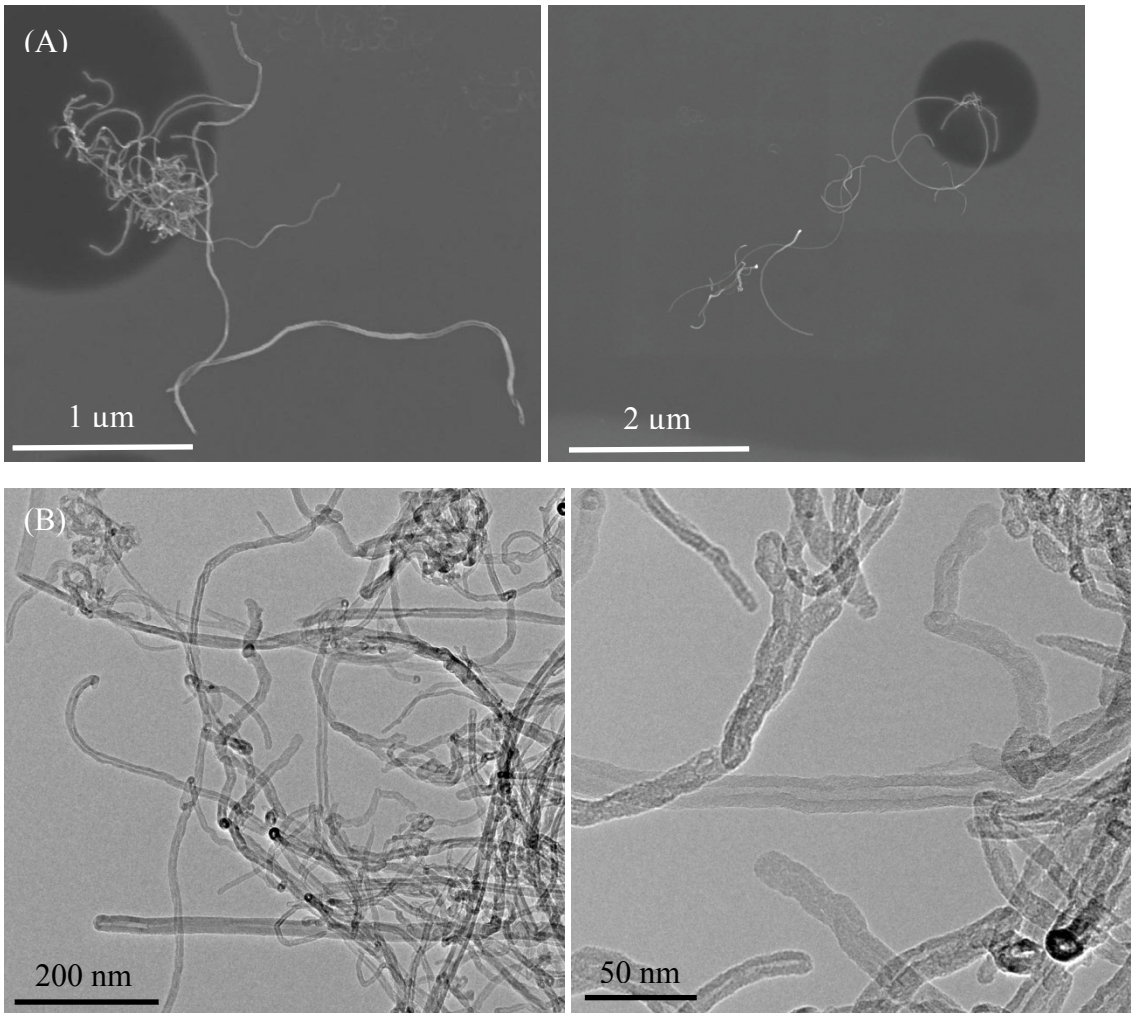

Fig.S2. Morphology of MWCNT-f-OH analyzed by SEM (A) and TEM (B).

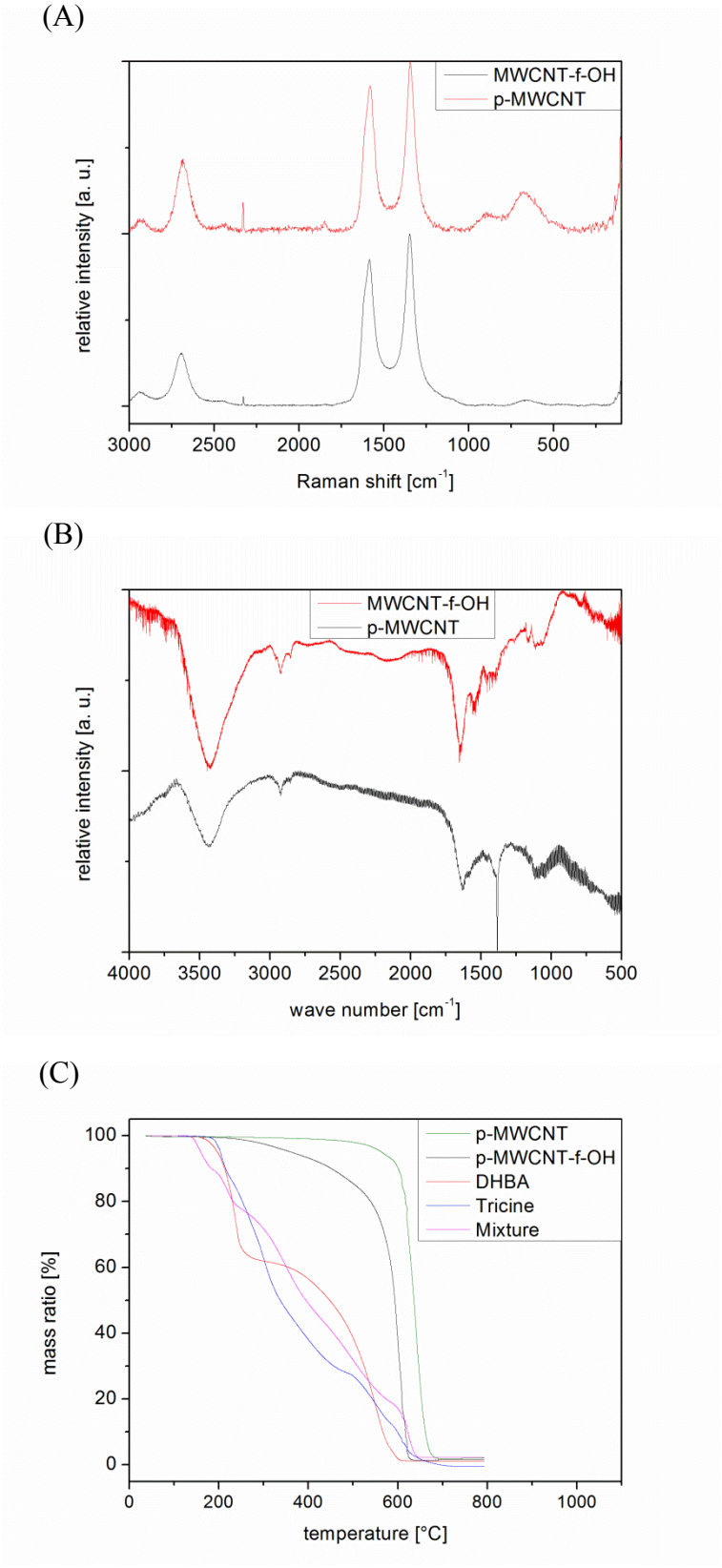

Fig. S3. Characterization of p-MWCNT and MWCNT-f-OH (A) Raman spectra; (B) IR-spectra; (C) TGA curves of p-MWCNT, MWCNT-f-OH, DHBA, tricine and a 2:2.7:3.5 mixture of the reactants.

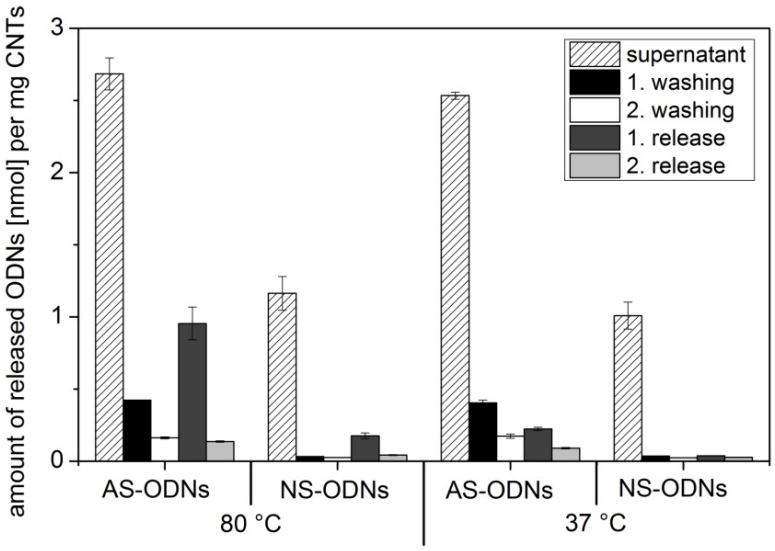

Fig. S4. Hybridization of AS-ODNs and NS-ODNs to MWCNT-f-OH (t = 30 min, c (ODN) = 0.5 µM) followed by a release at 37 °C and 80 °C measured by fluorescence labeling.

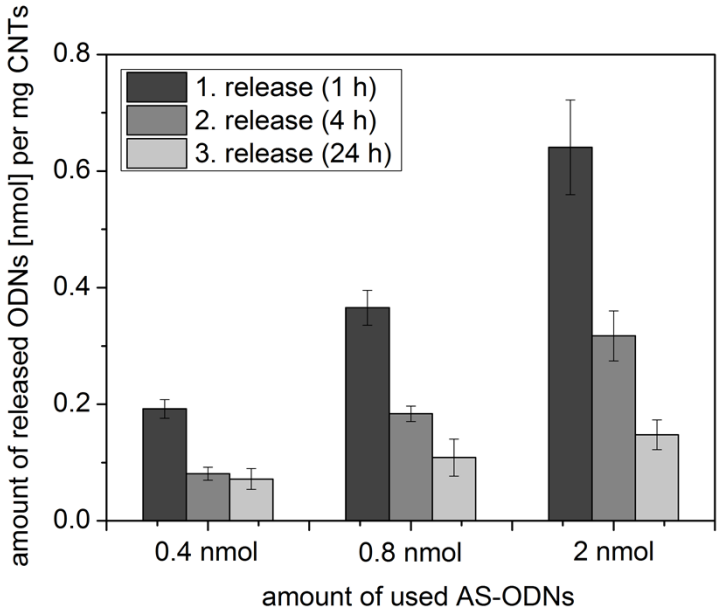

Fig. S5. Release of AS-ODNs in cytosol extract (protein content = 1 mg/ml) after adsorption to MWCNT-f-OH followed by a release at 37 °C measured by fluorescence labeling.

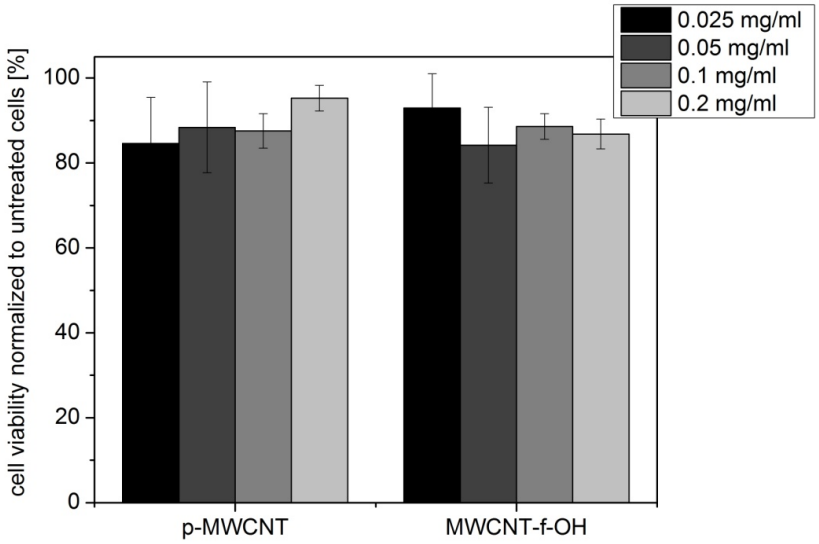

Fig. S6. Cellular viability of EJ28 after 24 h treatment with different concentrations of p-MWCNT and MWCNT-f-OH measured by WST-1 assay after 96 h (normalized to untreated cells).

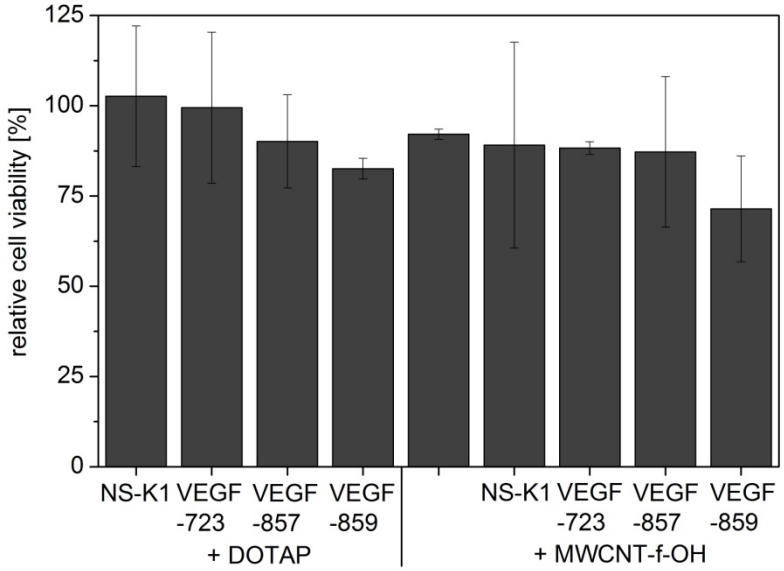

Fig. S7. Cellular viability of EJ28 after 4 h transfection with 0.5 μM AS-ODNs with DOTAP or with 0,1 mg/ml MWCNT-f-OH measured by WST-1 assay after 72 h (normalized to untreated cells).

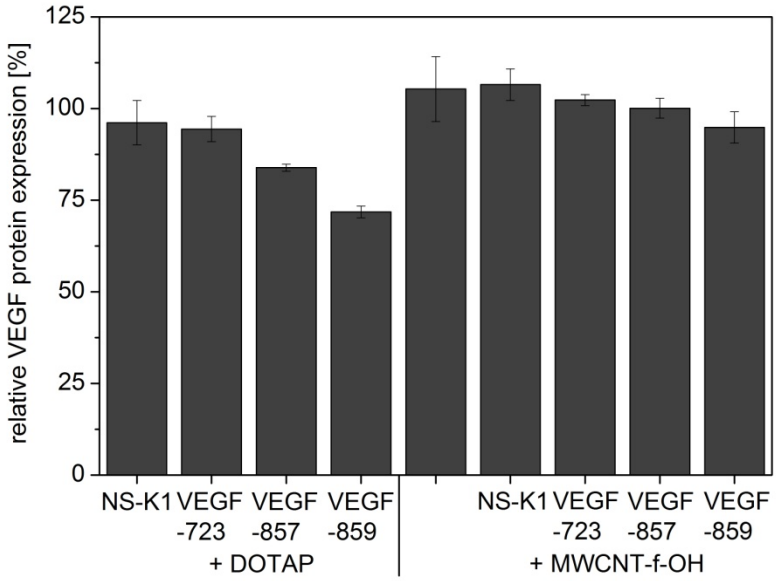

Fig. S8. VEGF protein expression of EJ28 after 4 h transfection with 0.5 µM AS-ODNs with DOTAP or with 0,1 mg/ml MWCNT-f-OH measured by VEGF-specific ELISA after 72 h (normalized to untreated cells).