

Esterase-Responsive Polyglycerol-Based Nanogels for Intracellular Drug Delivery in Rare Gastrointestinal Stromal Tumors

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Keywords, Nanogels, Drug Delivery, GIST, iEDDA, Poly Glycerol

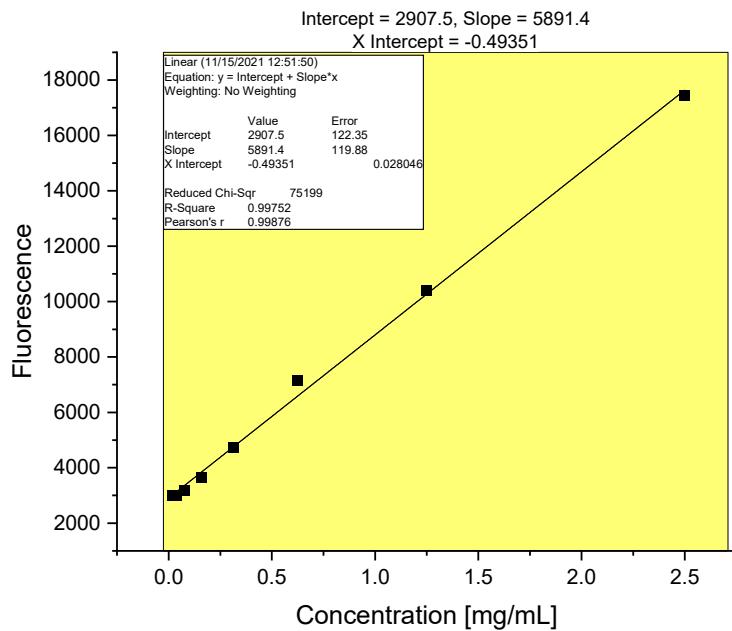


Figure S1: Calibration curve of 17-AAG obtained from UV/Vis measurements at 550 nm.

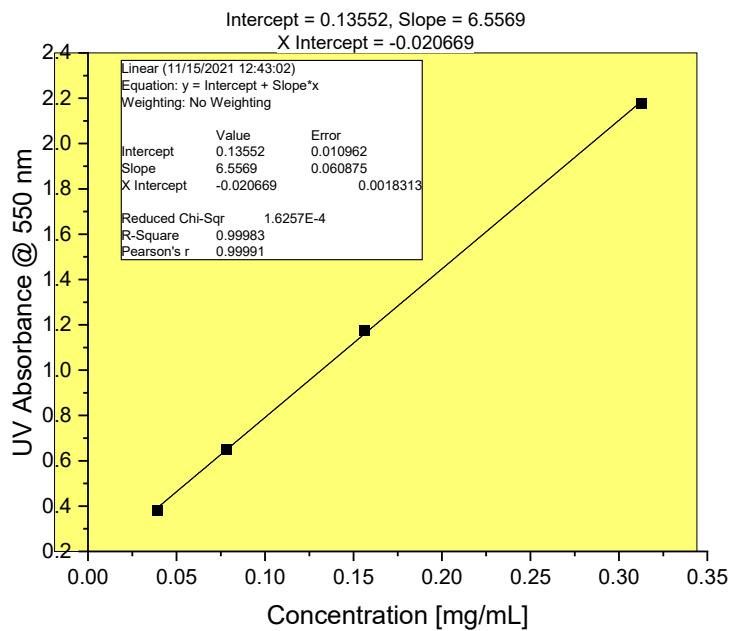


Figure S2: Calibration curve of BLU-285 obtained from fluorescence measurements using 380 nm as λ_{ex} and 440 nm as λ_{em} .

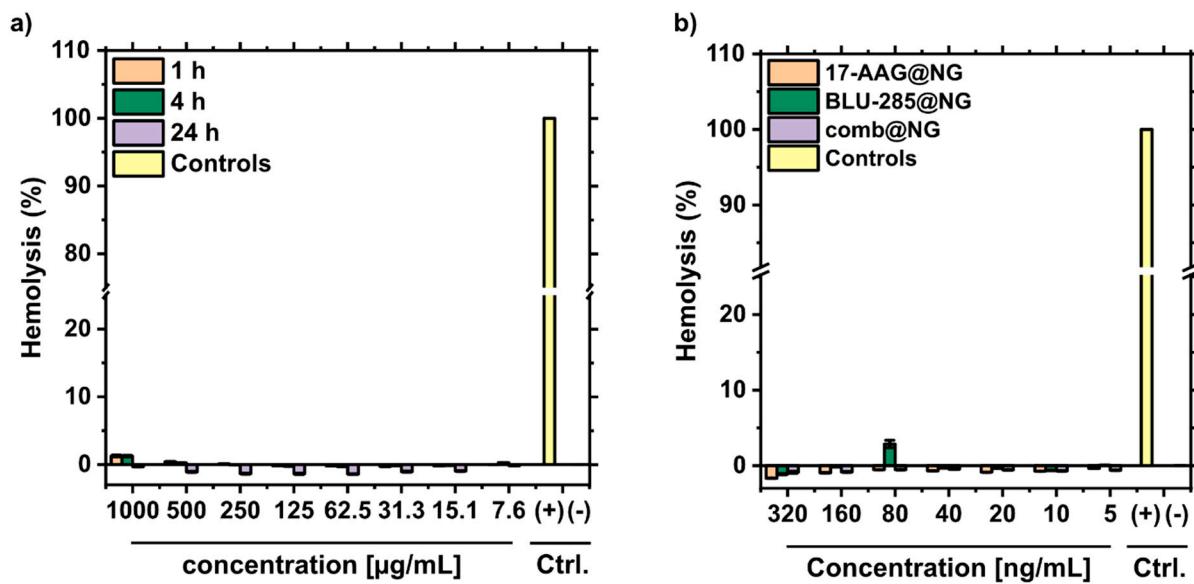


Figure S3: Results of ex vivo red blood cell hemolysis assay. Absorbance of supernatant at 410 nm after ex vivo red blood cell hemolysis assay of (a) empty NGs and (b) loaded NGs ($n = 3$) after 24 h. DPBS was used as negative control ((-), $n = 6$) 1% Triton X-100 as positive control ((+), $n = 6$).

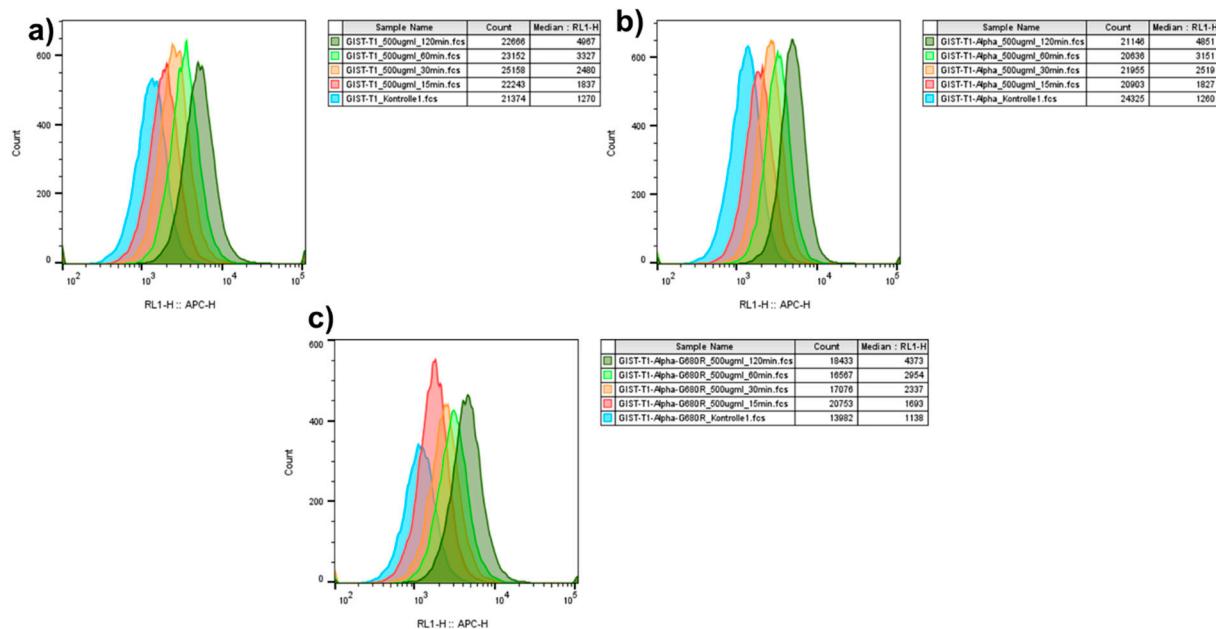


Figure S4: Flow cytometry histograms of (a) GIST T1, (b) T1- α -D842V and (c) T1- α -D842V-G680R cells treated with cy5-labeled NGs over a period of 48 h.

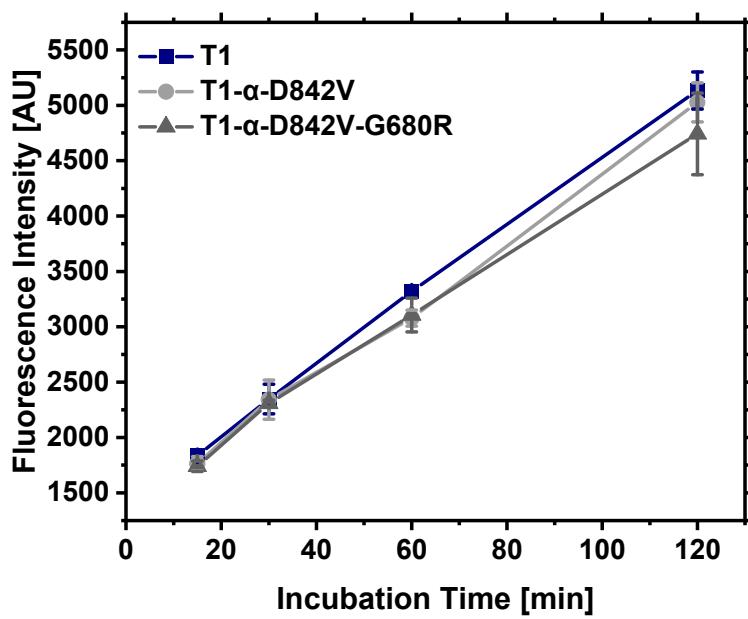


Figure S5: Fluorescence intensity quantification of flow cytometry experiments.

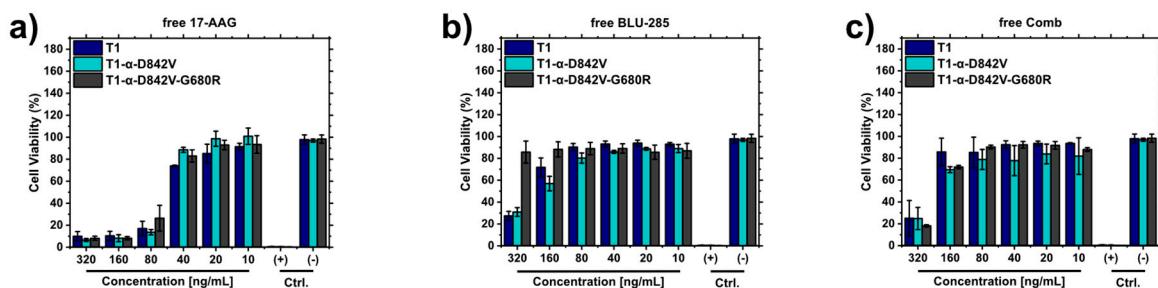


Figure S6: Cell viability results of (a) free 17-AAG, (b) free BLU-285 and (c) free comb.

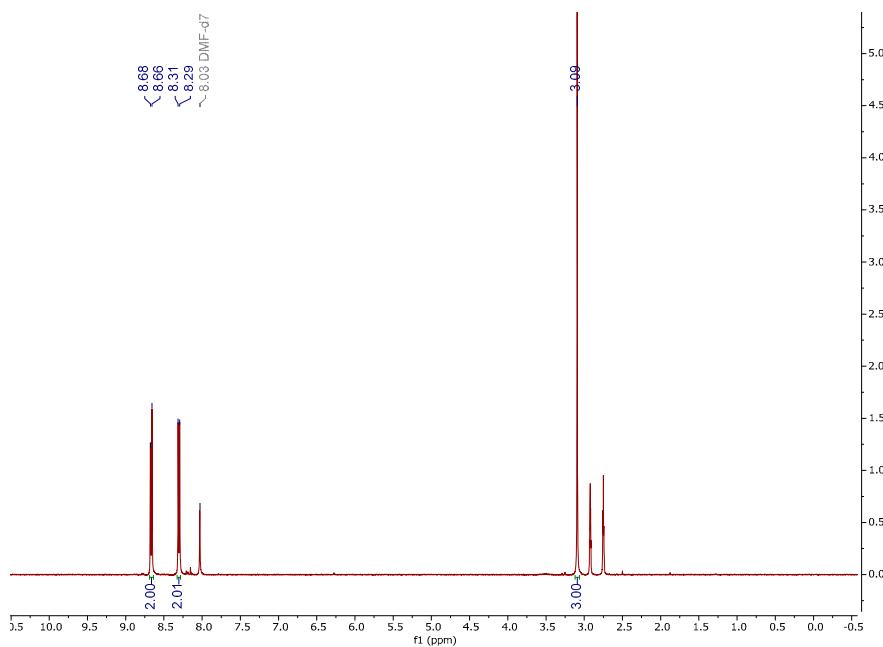


Figure S7: ^1H NMR (400 MHz, DMF-d7) of metTet-COOH.

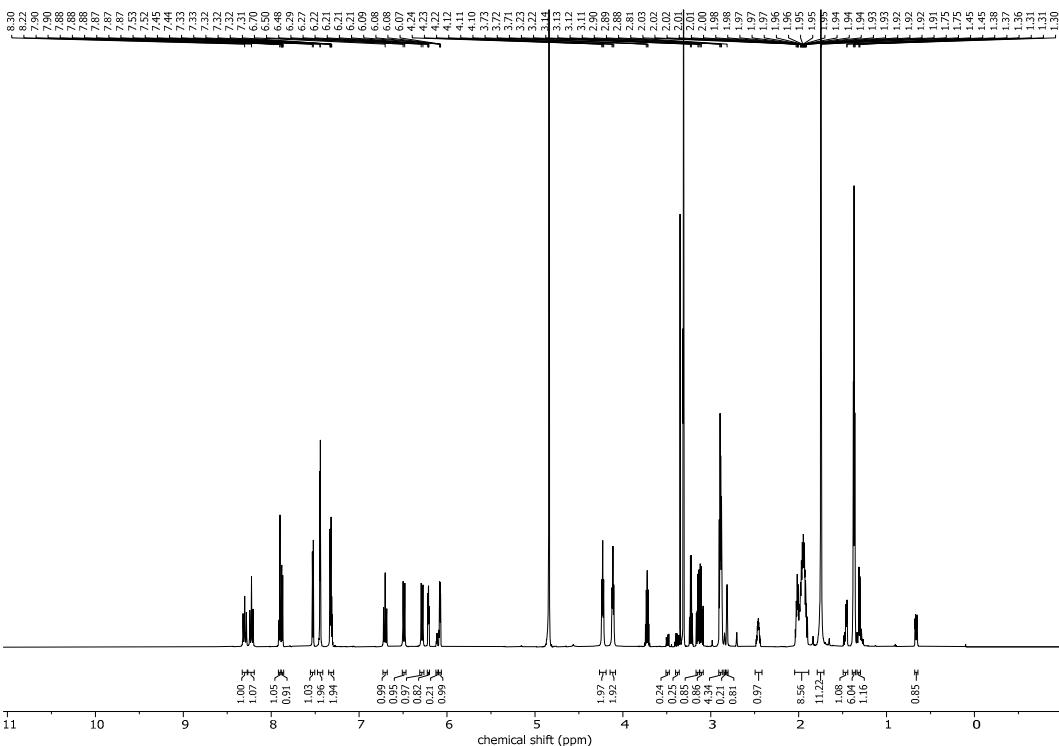
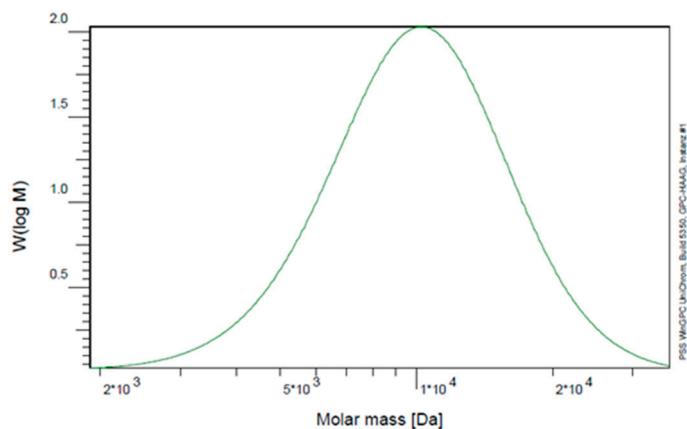


Figure S8: ^1H NMR (700 MHz, CD₃OD) of cy5-Norb.



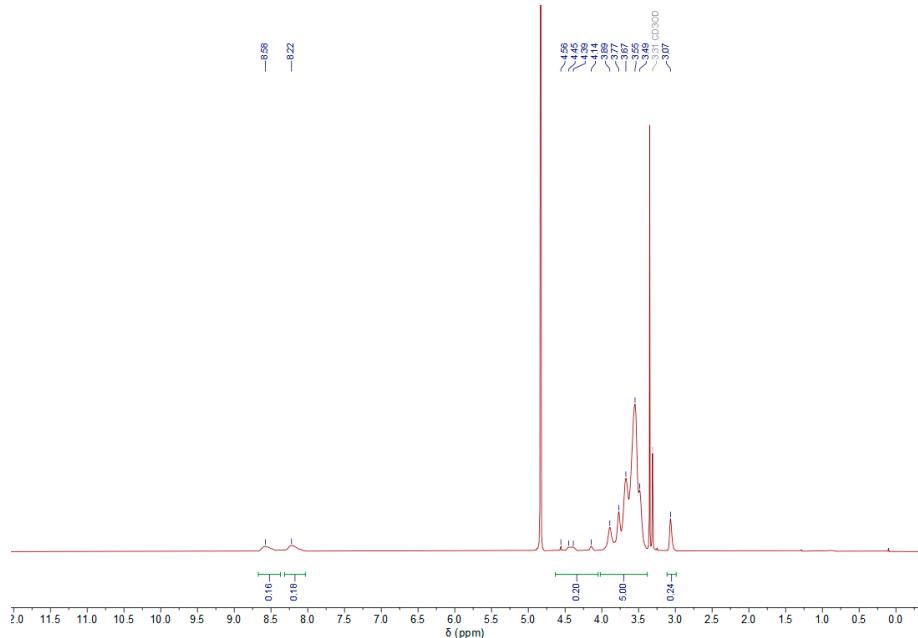
Probe : Vial_2: SS 1000 - 1
Integration von : Donnerstag 06.05.21 16:18:27
Integration bis : Donnerstag 06.05.21 16:22:19
Kalibration : Pullulan 201015 WasserSuprema.CAL
MHK - A (Kal.): 0.000E+0
Int.Stand.-K : 34.284 ml
Pumpe : n.a.
Konzentration : 6.000 g/l
Säule 1 : PSS Suprema Vorsäule 10µm
Säule 2 : PSS Suprema 10µm 30Å
Säule 3 : PSS Suprema 10µm 1000Å
Säule 4 : PSS Suprema 10µm 1000Å
Detektor 1 : I1: VWD 1, Signal A
Detektor 2 : I1: RID 1, RI Signal
Detektor 3 : I1: IsoPump 1, Pressure
Detektor 4 : PSS SLD 7000/Bl-MwA
Operator : GPC

Eluent : H₂O+0,1M NaNO₃
MHK - K (Kal.): 1.000E+0 ml/g
Int.Stand.-M : 34.304 ml
Flussrate : 1.000 ml/min
Injektvolumen : 25.000 ul
Temperatur : 0.000 °C
Temperatur : 0.000 °C
Temperatur : 0.000 °C
Temperatur : 0.000 °C
Versatz : 0.000 ml
Versatz : 0.383 ml
Versatz : 0.000 ml
Versatz : 0.000 ml
Messintervall : 1.000 sec

I1: RID 1, RI Signal

Mn : 8.8073e3 g/mol
Mw : 1.0987e4 g/mol
Mz : 1.3415e4 g/mol
Mv : 0.000000 g/mol
D : 1.2475e0
[n]: 0.000000 ml/g
Vp : 2.6875e1 ml
Mp : 1.0202e4 g/mol
Fl : 1.876e-2 ml/V
< 1895 0.00
w%: 100.00
> 36182 0.00

Figure S9: GPC of dPG-OH.



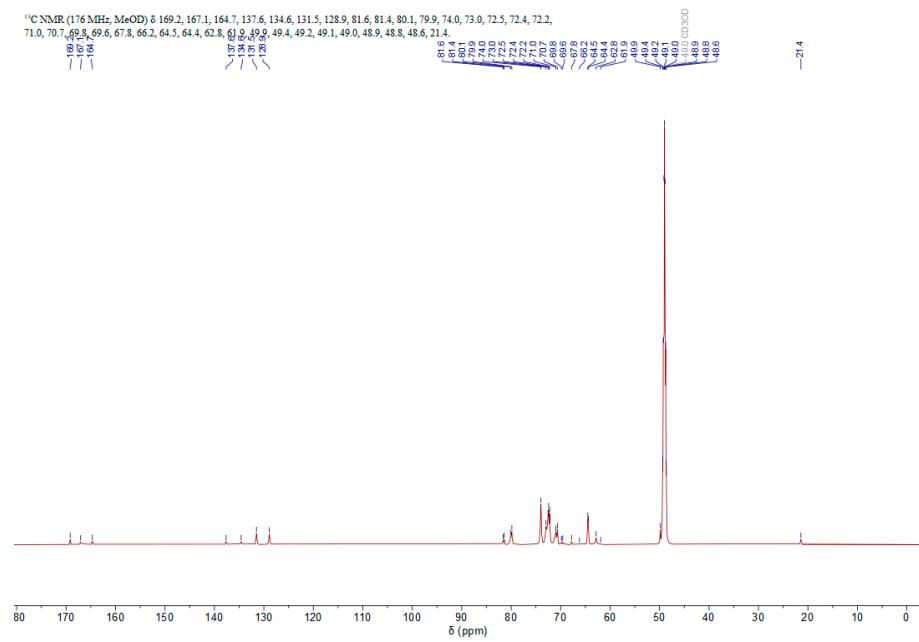


Figure S11: ^{13}C NMR (176 MHz, CD_3OD) of dPG-O-metTet.

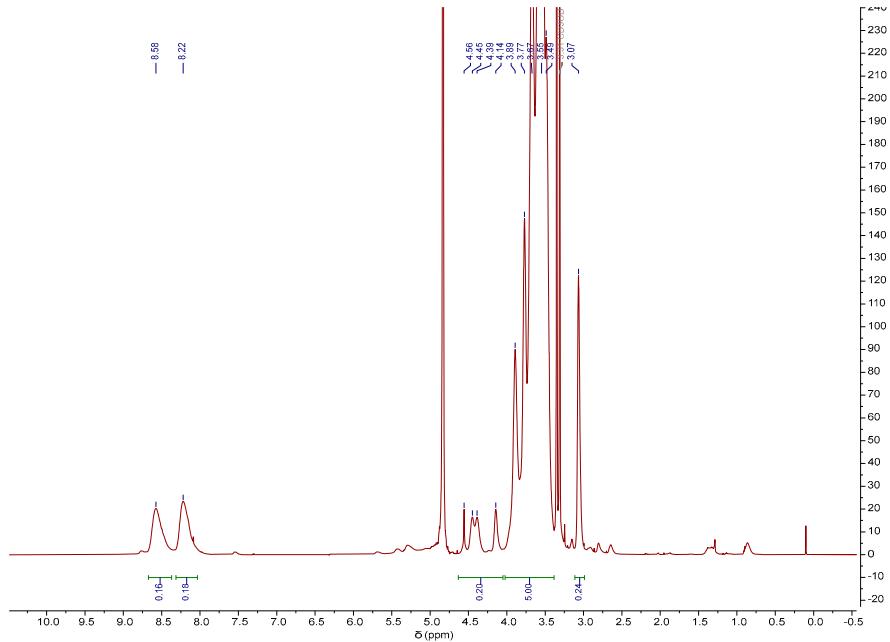


Figure S12: ^1H NMR (700 MHz, CD_3OD) of dPG-O-Norb.

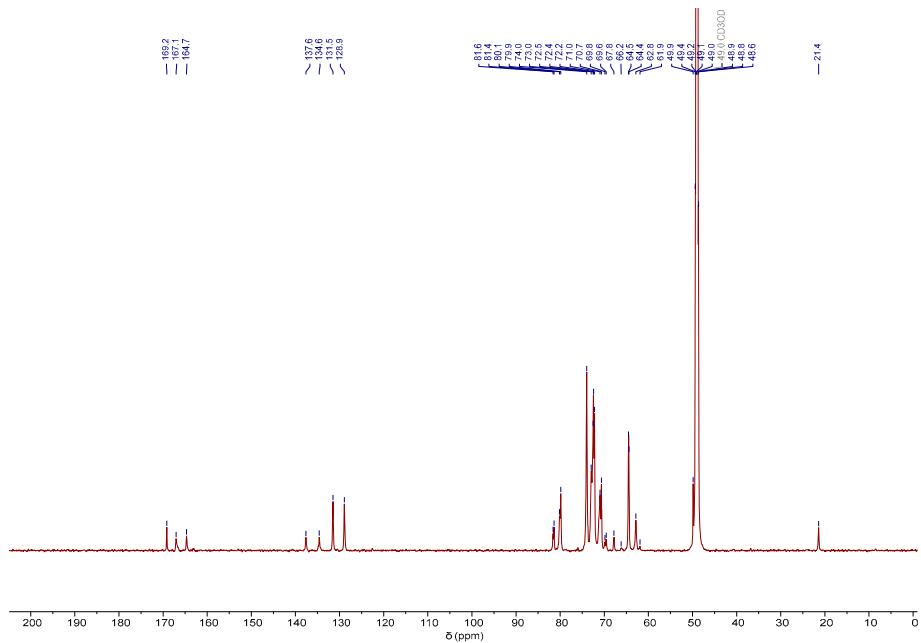


Figure S13: ^{13}C NMR (176 MHz, CD_3OD) of dPG-O-Norb.

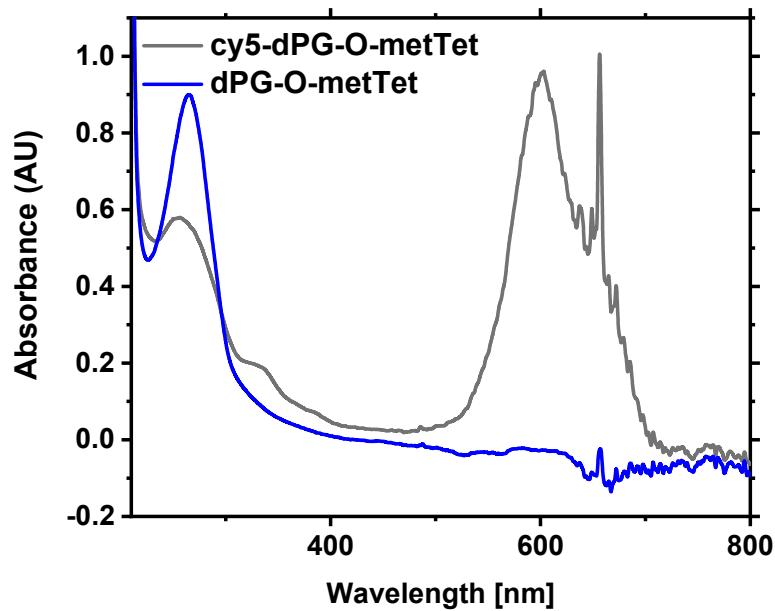


Figure S14: UV/Vis spectra of dPG-O-metTet (blue) and cy5-dPG-O-metTet (green).