

Supporting Information

Amphiphilic fluorescein triazoles: synthesis and visible light catalysis in water

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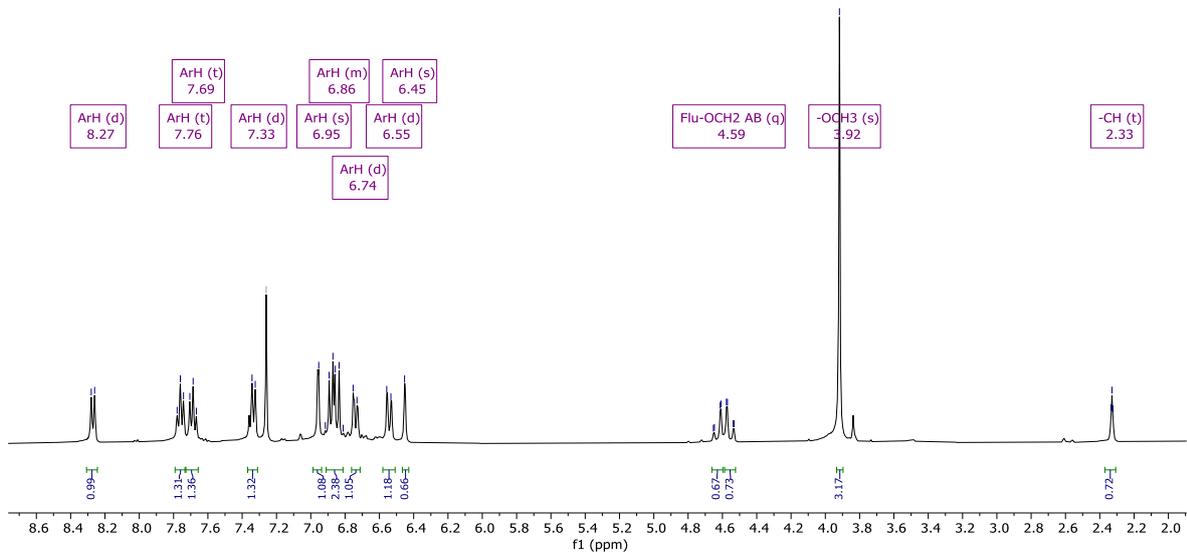
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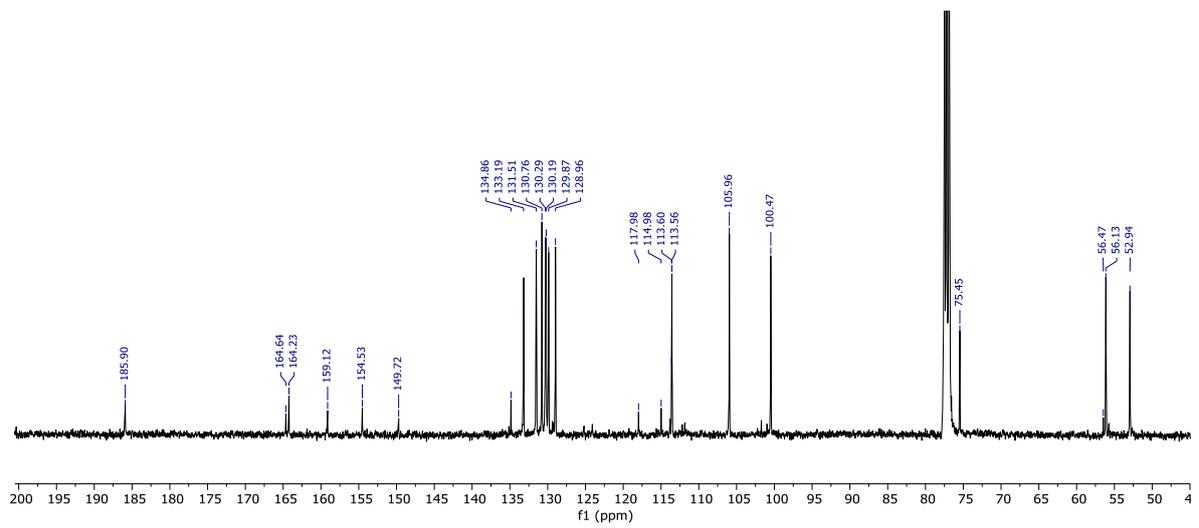
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a)



b)



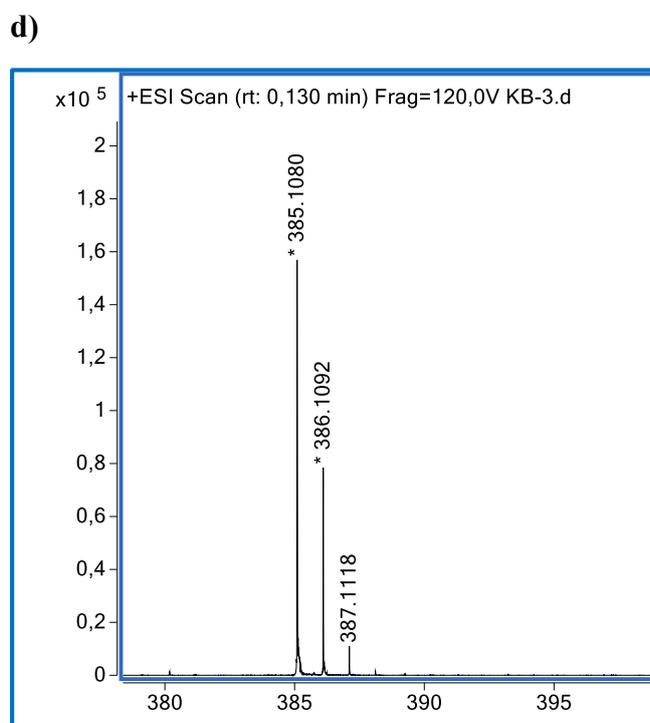
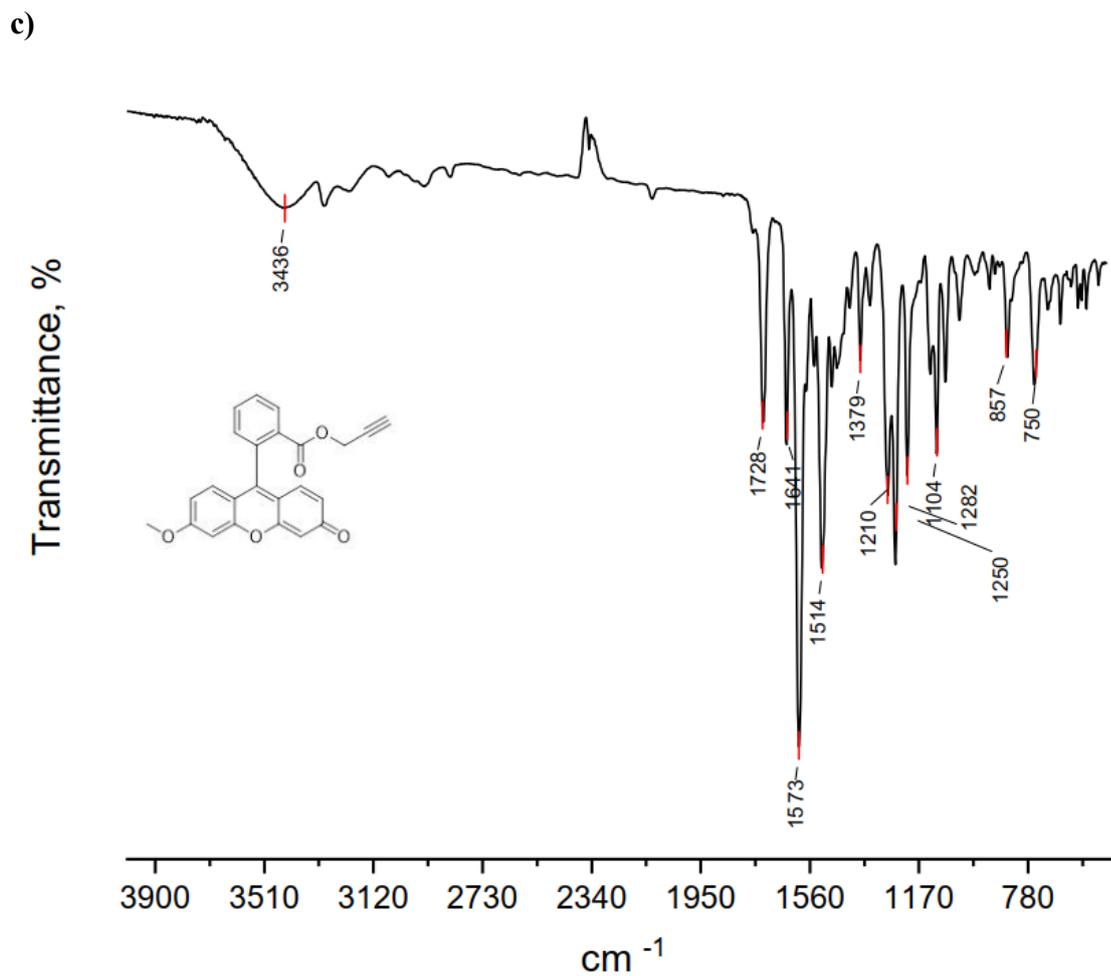
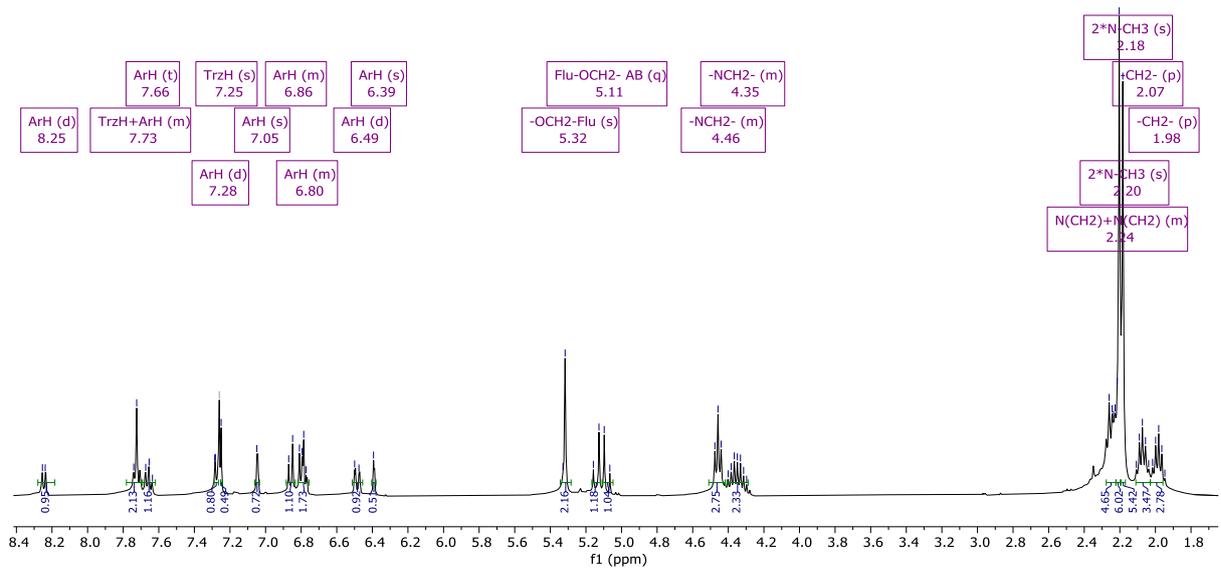
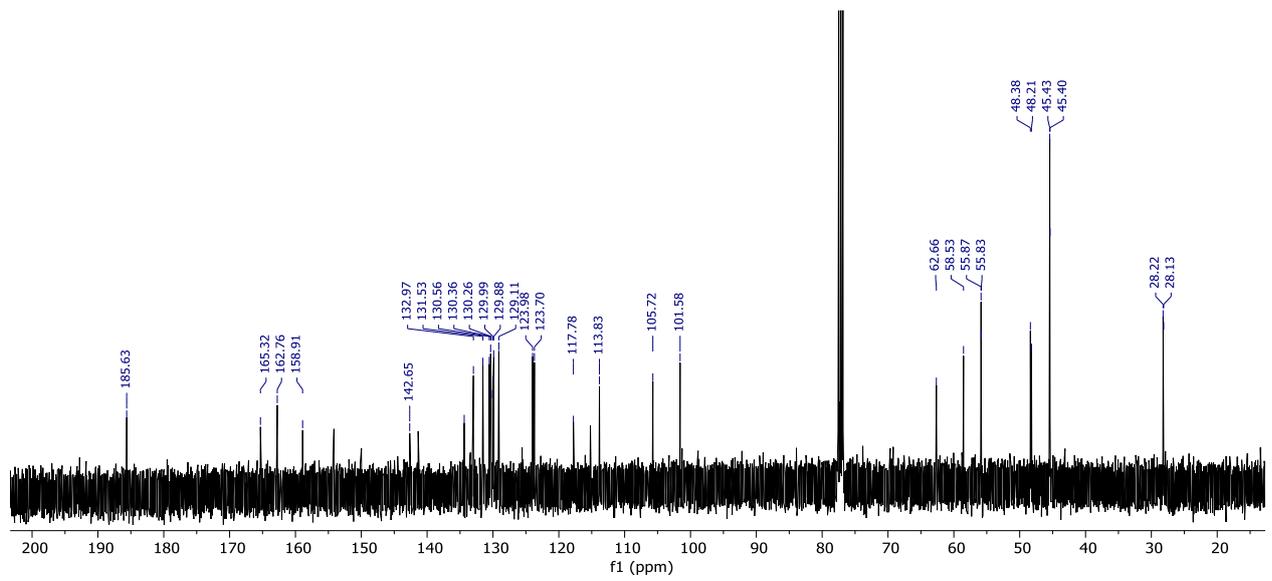


Figure S1. NMR ¹H (a), ¹³C (b), FT IR (c) and HRESI MS (d) spectra of prop-2-yn-1-yl 2-(6-methoxy-3-oxo-3*H*-xanthen-9-yl)benzoate (**5**).

a)



b)



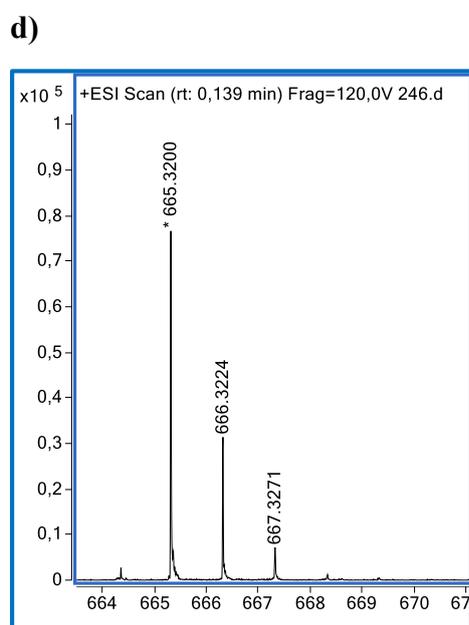
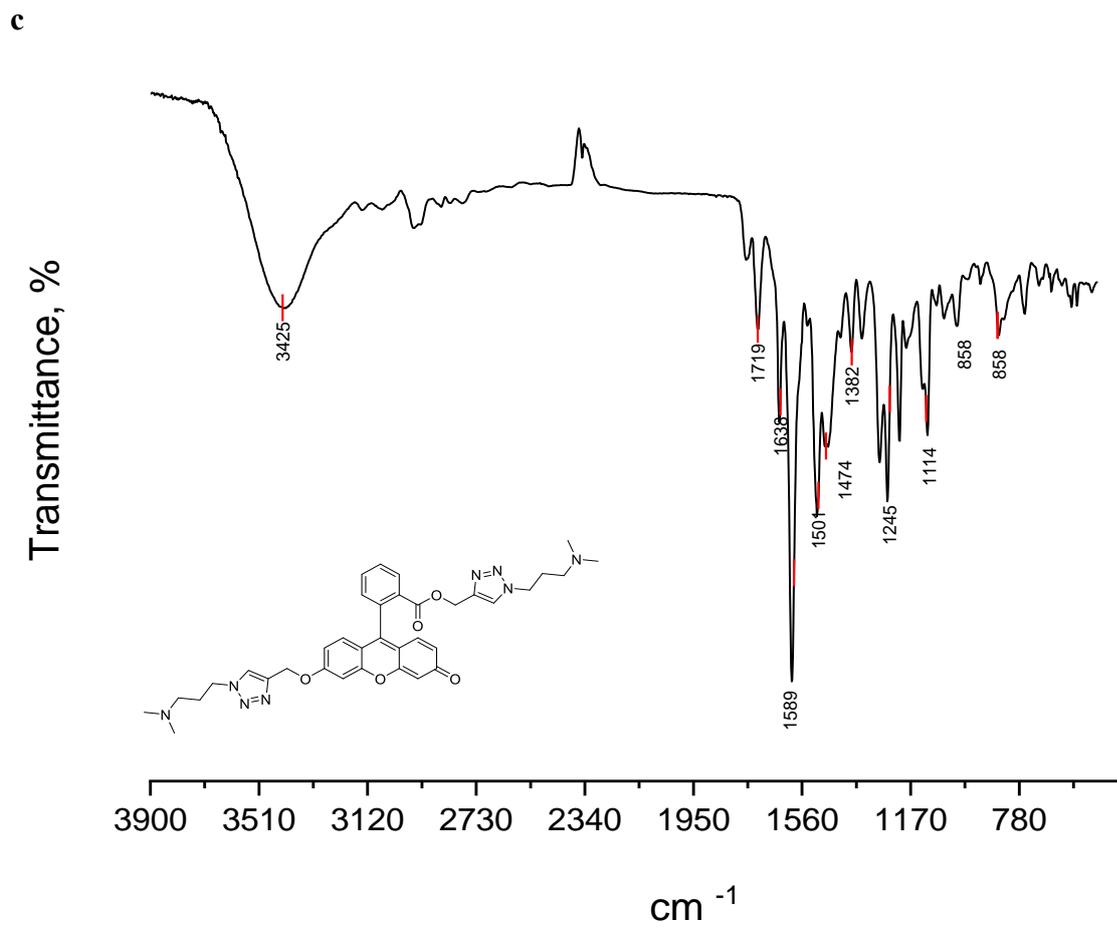
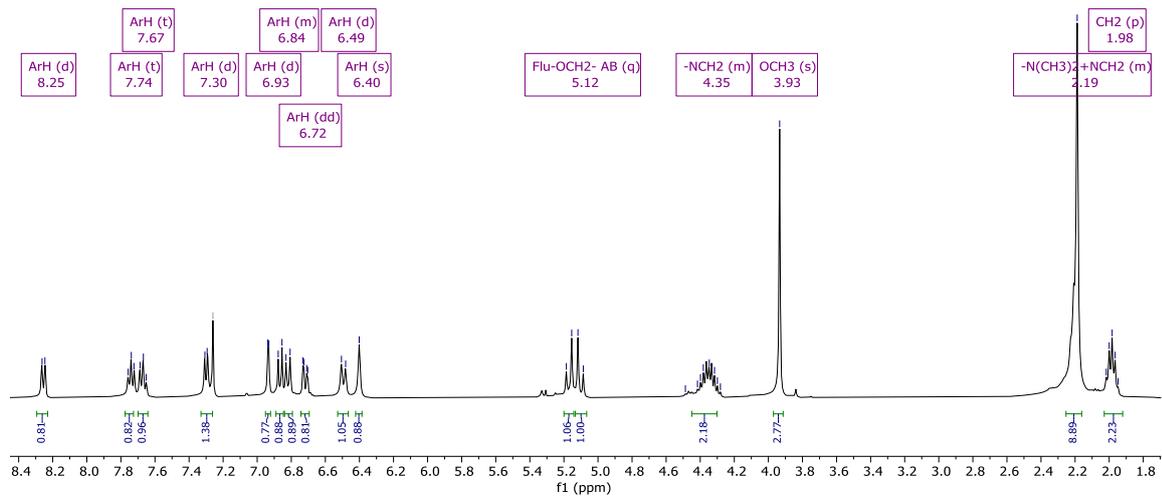
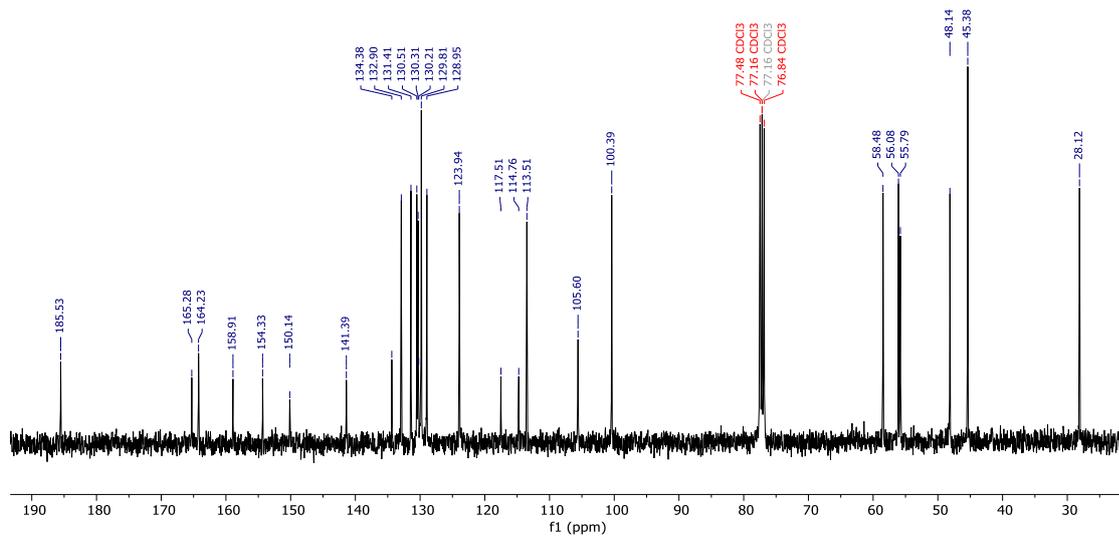


Figure S2. NMR ¹H (a), ¹³C (b), FT IR (c) and HRESI MS (d) spectra of (1-(3-(dimethylamino)propyl)-1*H*-1,2,3-triazol-4-yl)methyl 2-(6-((1-(3-(dimethylamino)propyl)-1*H*-1,2,3-triazol-4-yl)methoxy)-3-oxo-3*H*-xanthen-9-yl)benzoate (**8**).

a)



b)



c)

d)

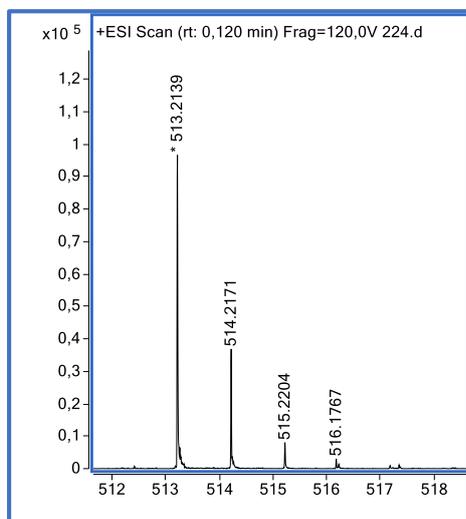
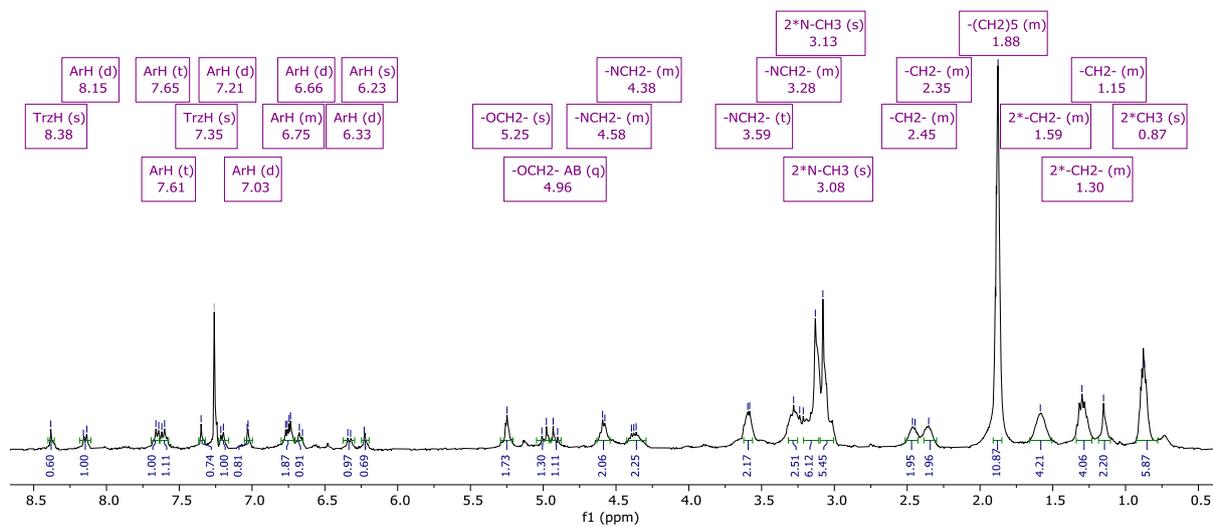
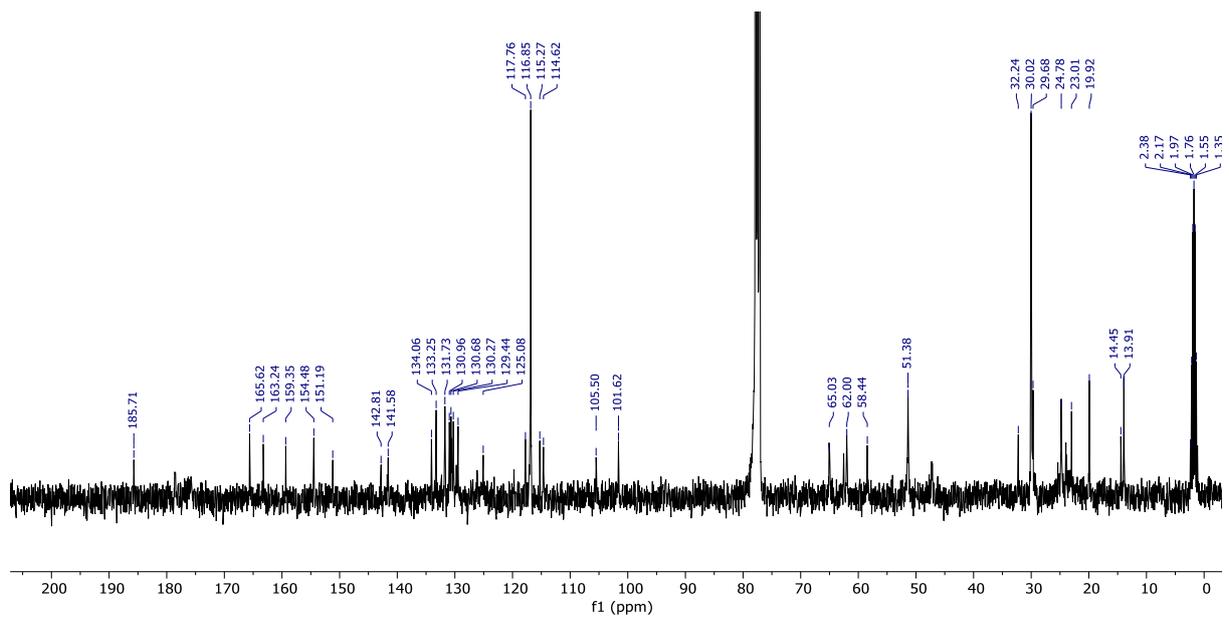


Figure S3. NMR ¹H (a), ¹³C (b), FT IR (c) and HRESI MS (d) spectra of (1-(3-(dimethylamino)propyl)-1*H*-1,2,3-triazol-4-yl)methyl 2-(6-methoxy-3-oxo-3*H*-xanthen-9-yl)benzoate (**9**).

a)



b)



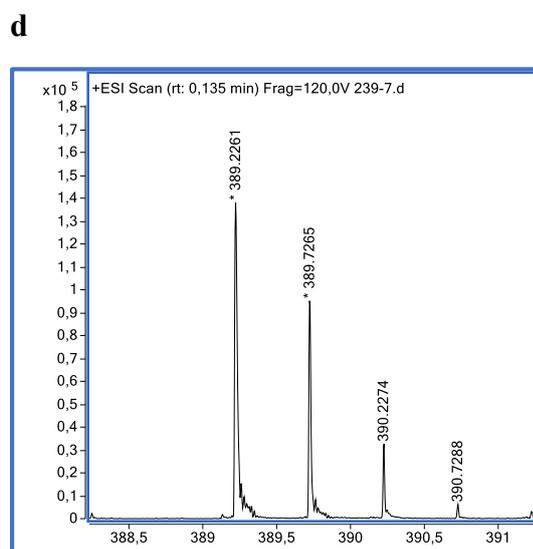
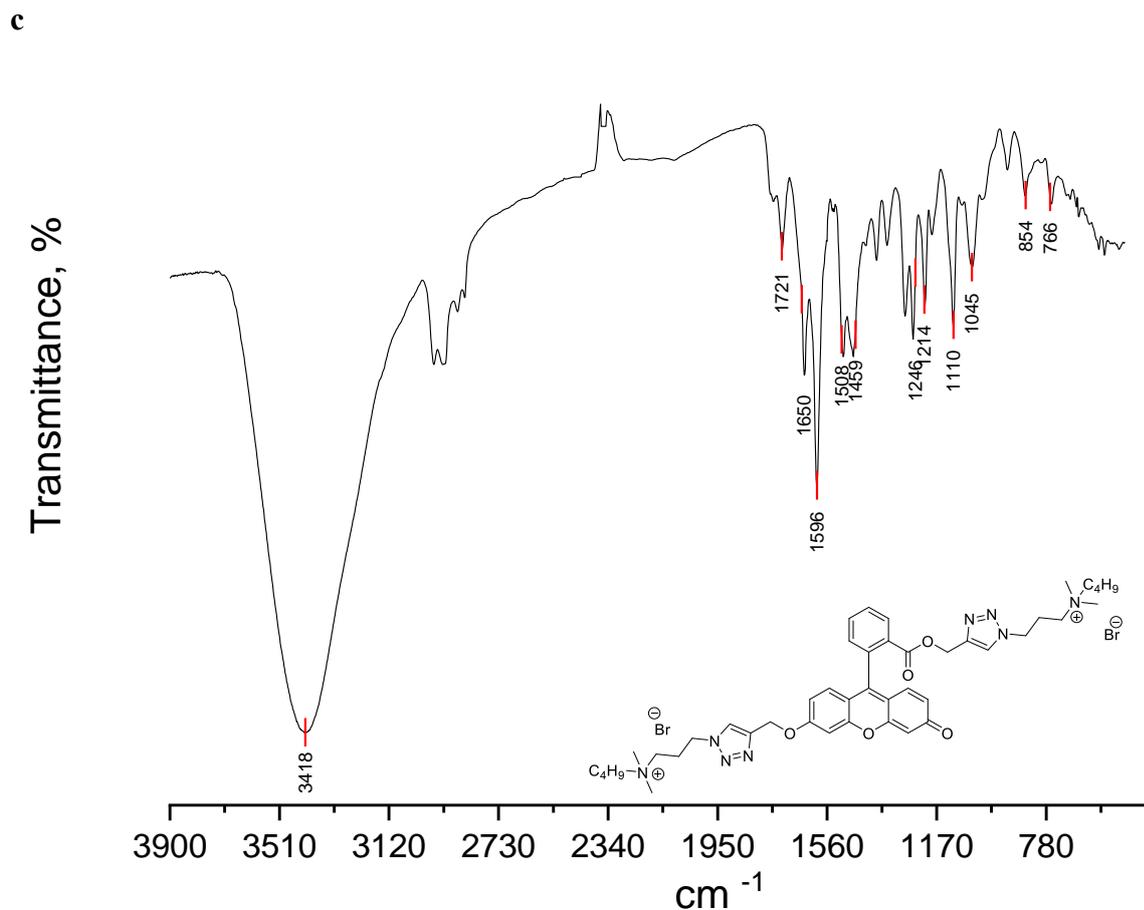
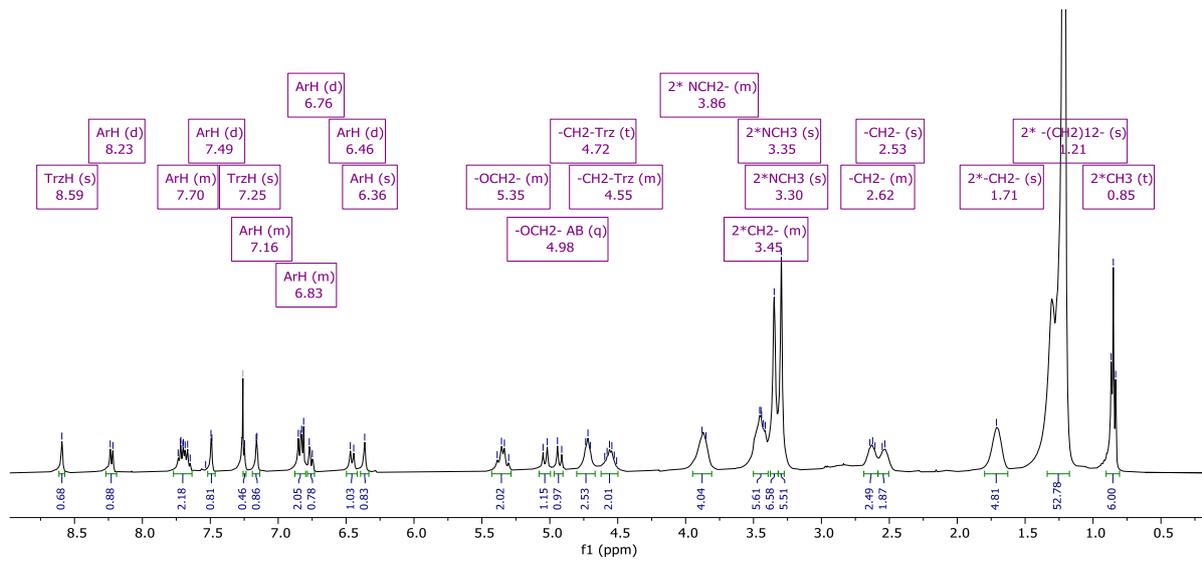
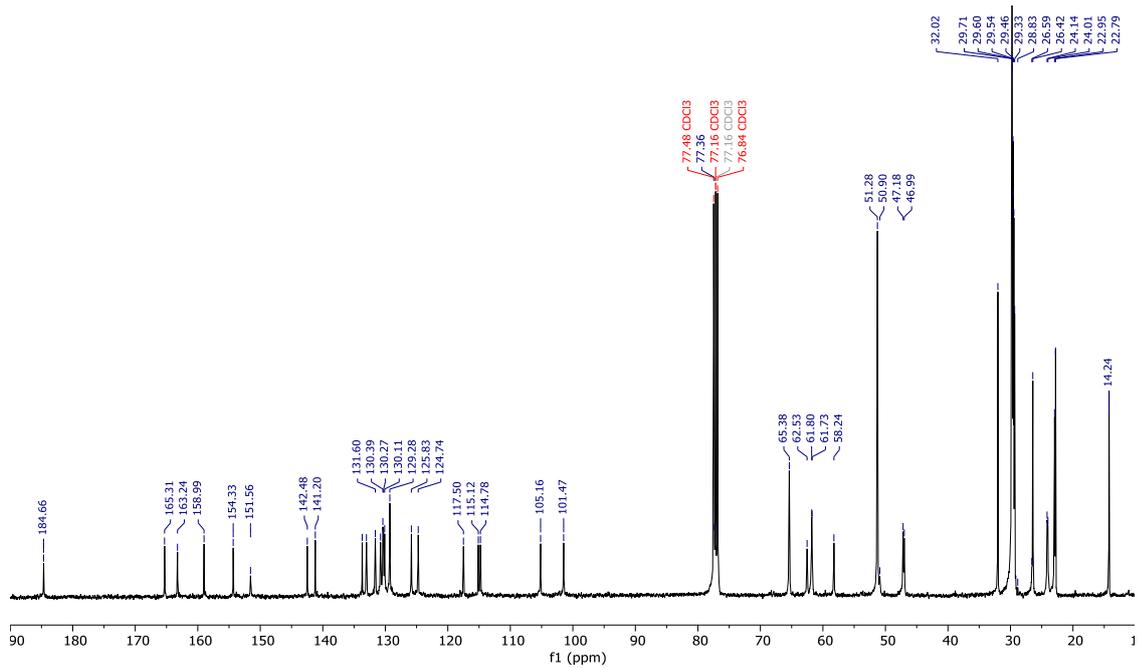


Figure S4. NMR ¹H (a), ¹³C (b), FT IR (c) and HRESI MS (d) spectra of *N*-(3-(4-(((2-(6-((1-(3-(butyldimethylammonio)propyl)-1*H*-1,2,3-triazol-4-yl)methoxy)-3-oxo-3*H*-xanthen-9-yl)benzoyl)oxy)methyl)-1*H*-1,2,3-triazol-1-yl)propyl)-*N,N*-dimethylbutan-1-aminium bromide (**10a**).

a**b**

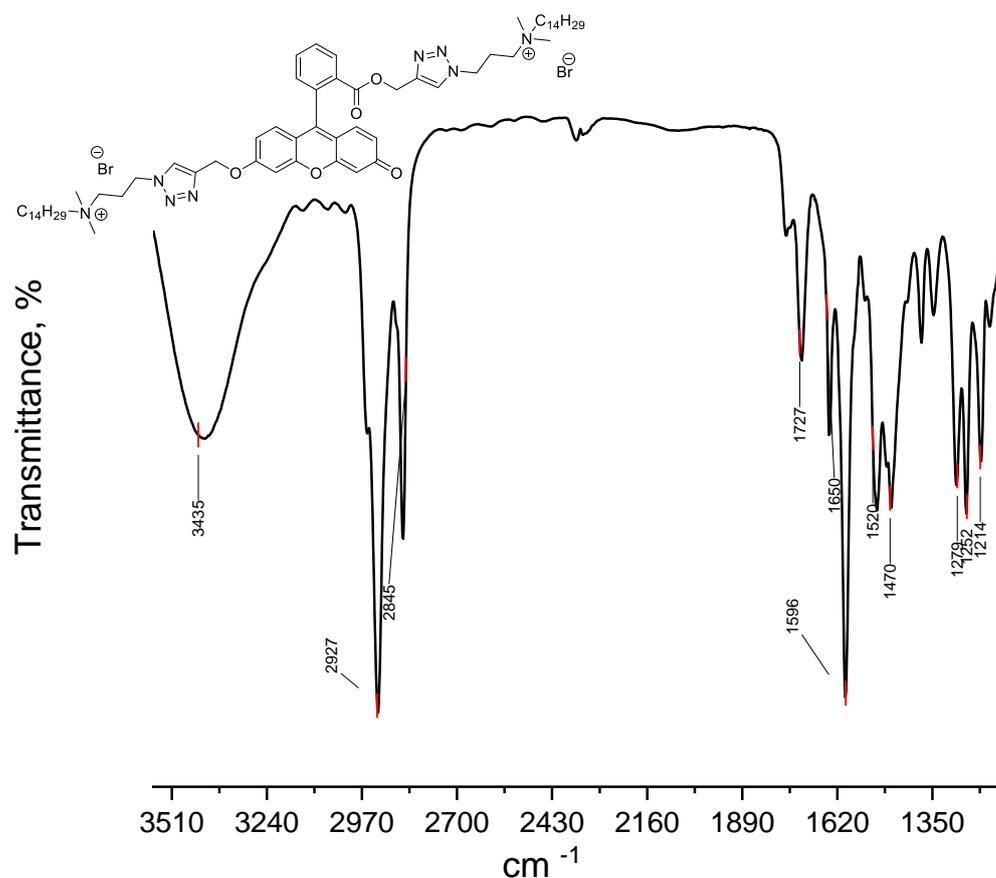
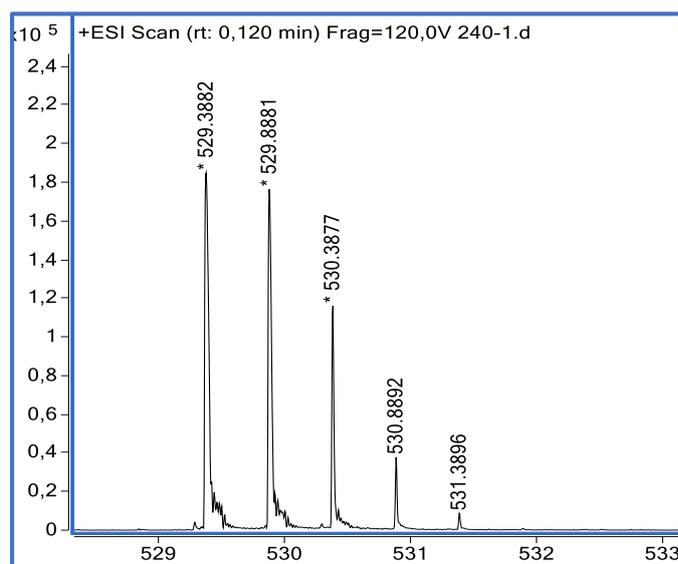
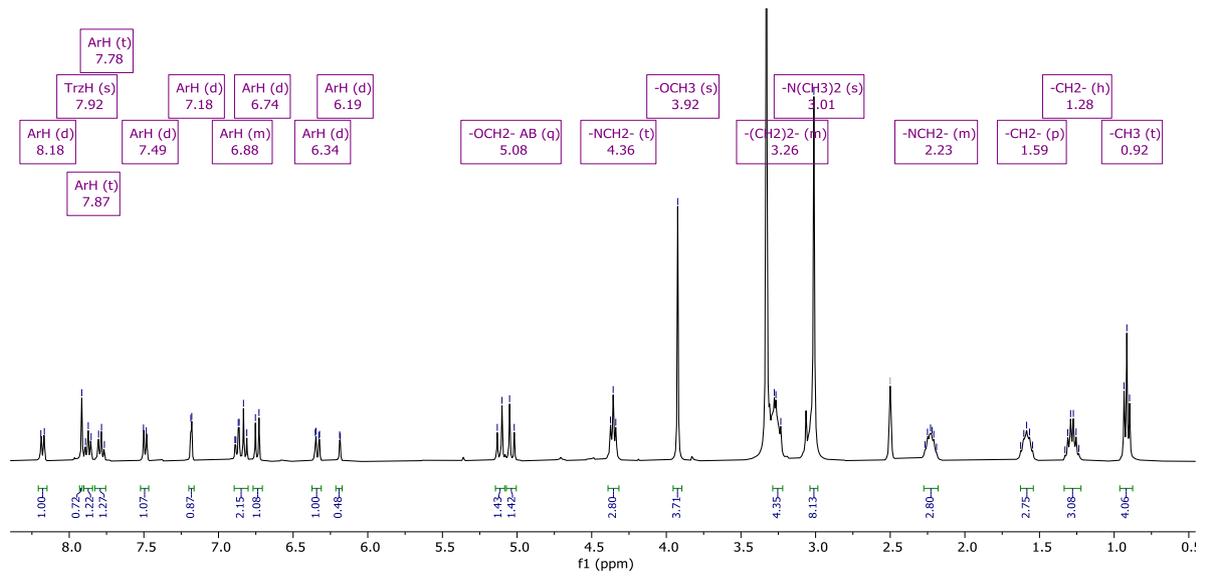
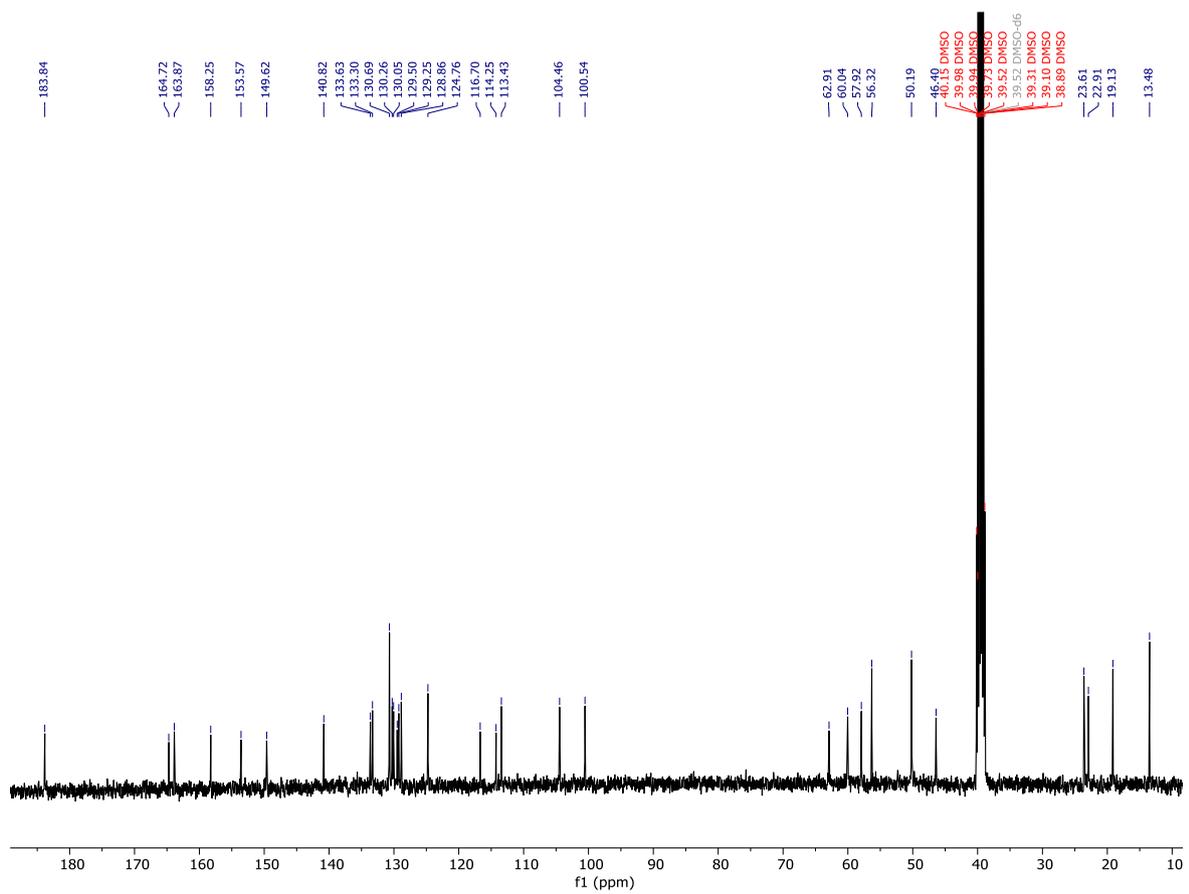
c**d**

Figure S5. NMR ¹H (a), ¹³C (b), FT IR (c) and HRESI MS (d) spectra of *N*-(3-(4-(((2-(6-((1-(3-(dimethyl(tetradecyl)ammonio)propyl)-1*H*-1,2,3-triazol-4-yl)methoxy)-3-oxo-3*H*-xanthen-9-yl)benzoyl)oxy)methyl)-1*H*-1,2,3-triazol-1-yl)propyl)-*N,N*-dimethyltetradecan-1-aminium bromide (**10b**).

a)



b)



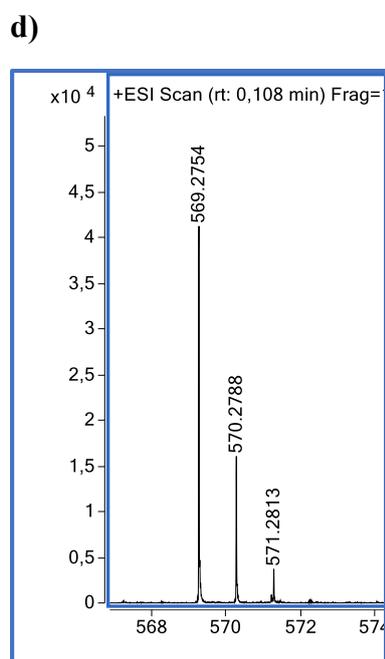
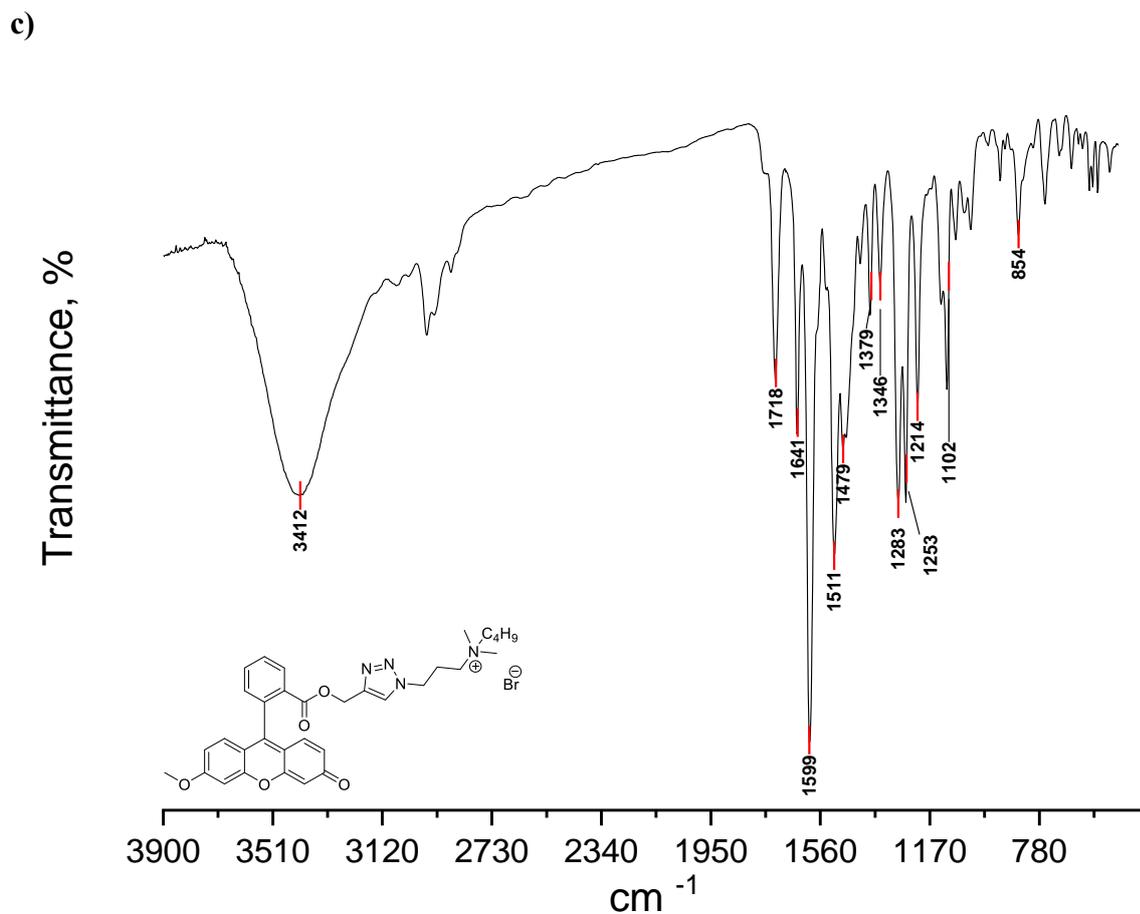
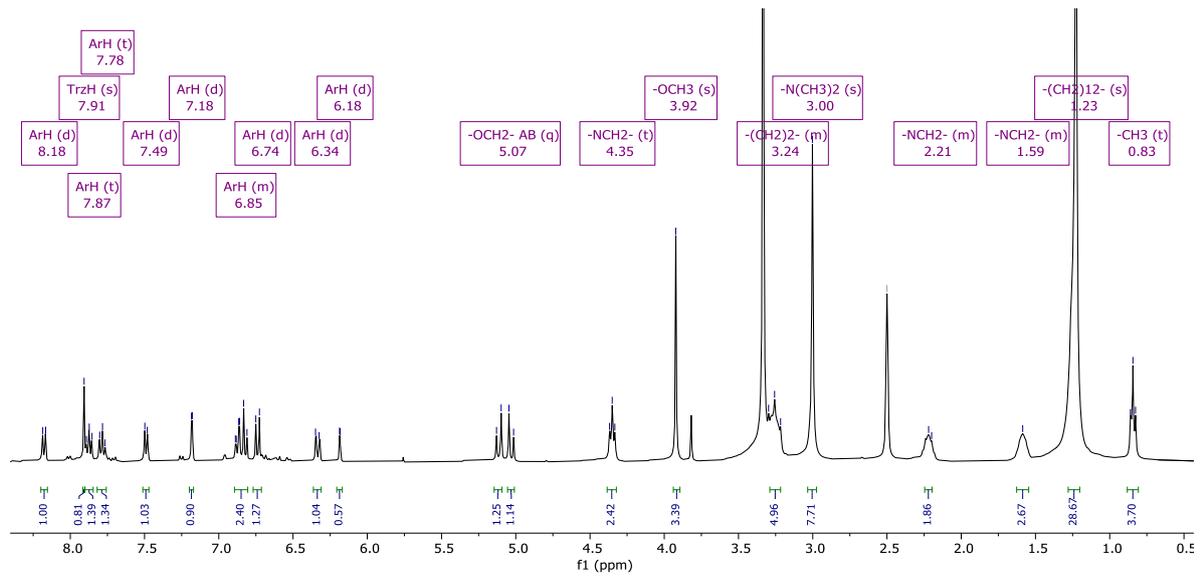
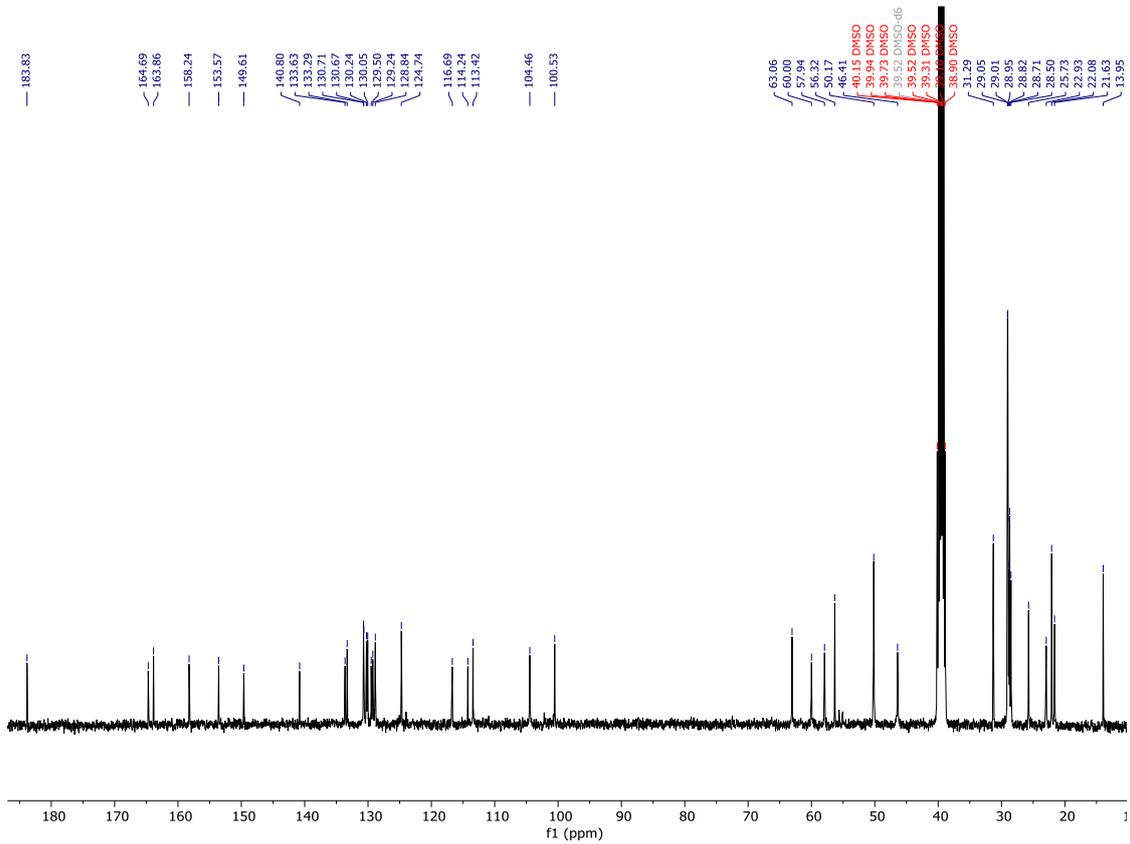


Figure S6. NMR ¹H (a), ¹³C (b), FT IR (c) and HRESI MS (d) spectra of *N*-(3-(4-(((2-(6-methoxy-3-oxo-3*H*-xanthen-9-yl)benzoyl)oxy)methyl)-1*H*-1,2,3-triazol-1-yl)propyl)-*N,N*-dimethylbutan-1-aminium bromide (**11a**).

a)



b)



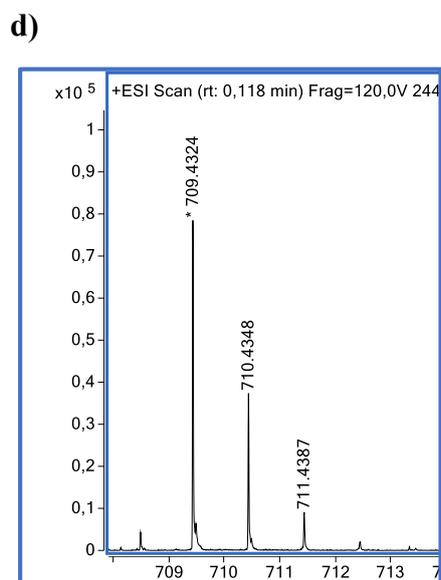
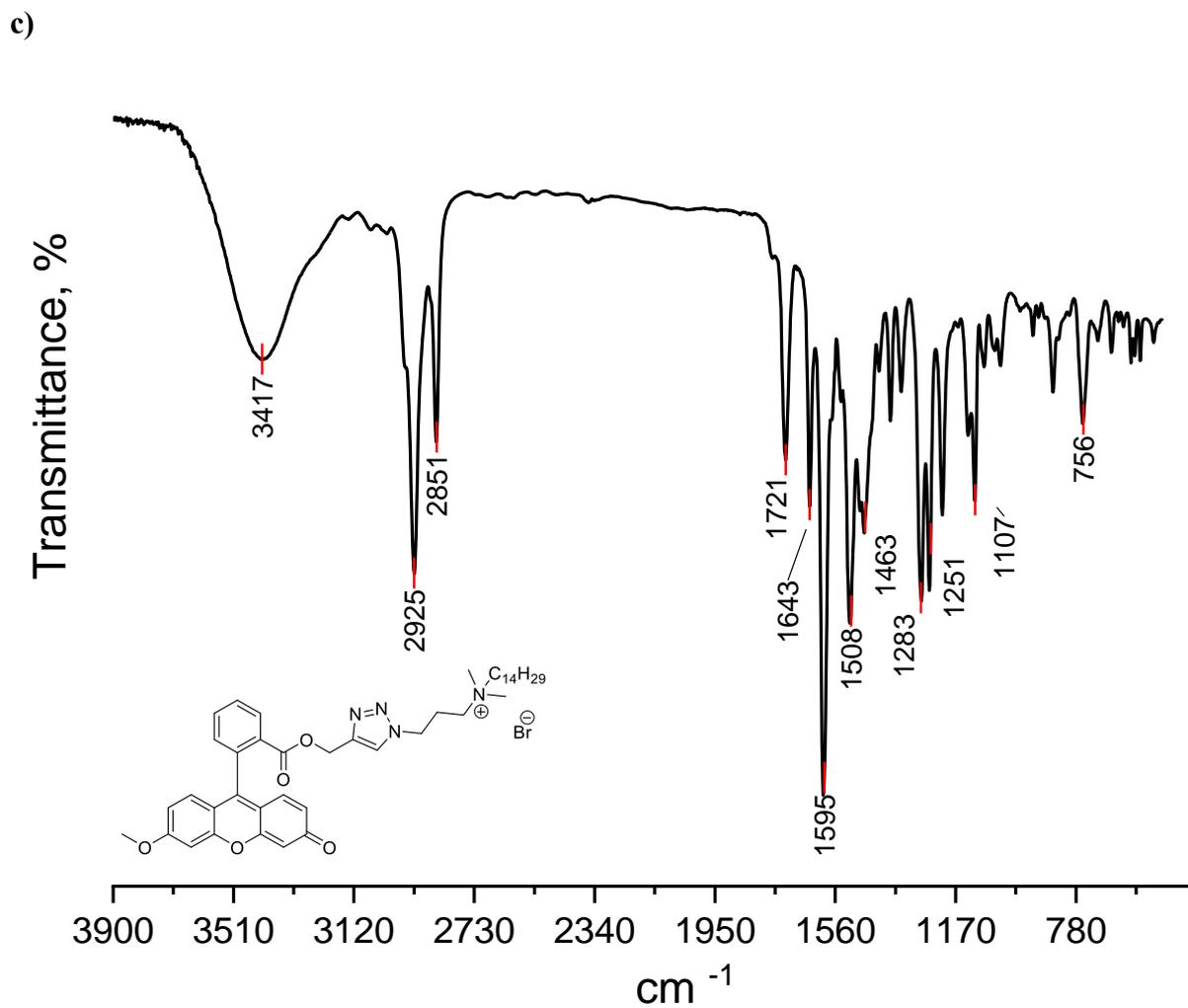


Figure S7. NMR ¹H (a), ¹³C (b), FT IR (c) and HRESI MS (d) spectra of *N*-(3-(4-(((2-(6-methoxy-3-oxo-3*H*-xanthen-9-yl)benzoyl)oxy)methyl)-1*H*-1,2,3-triazol-1-yl)propyl)-*N,N*-dimethyltetradecan-1-aminium bromide (**11b**).

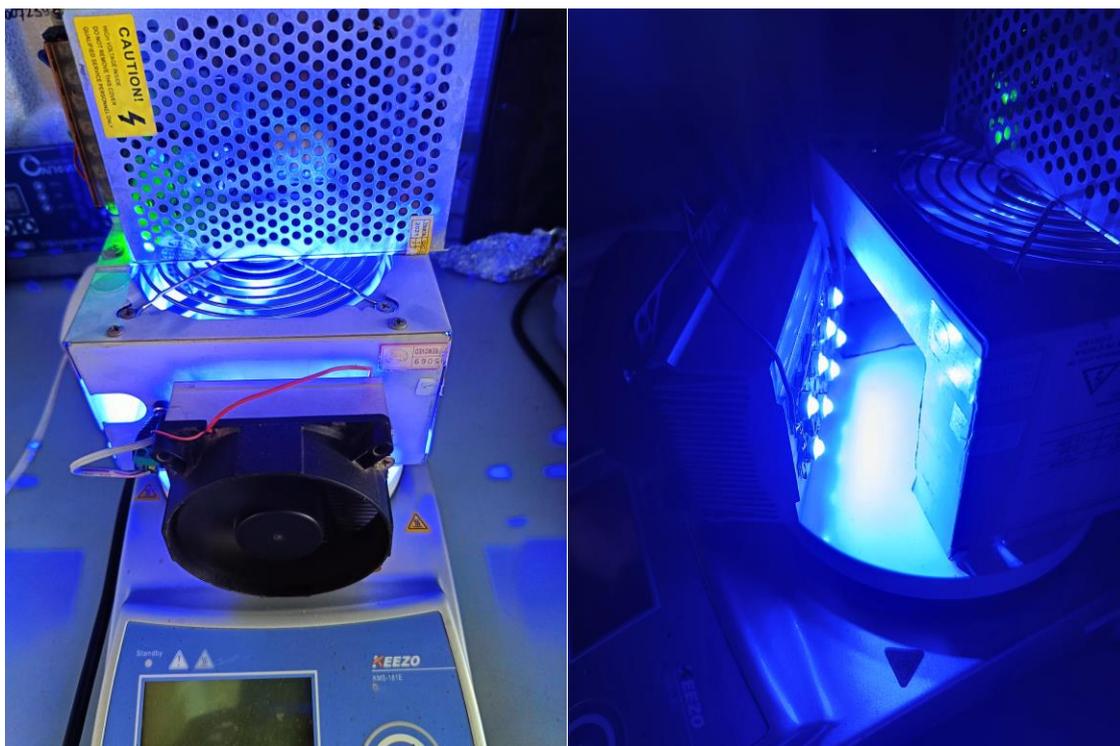


Figure S8. Photo of a 24W LED air-cooled photoreactor.

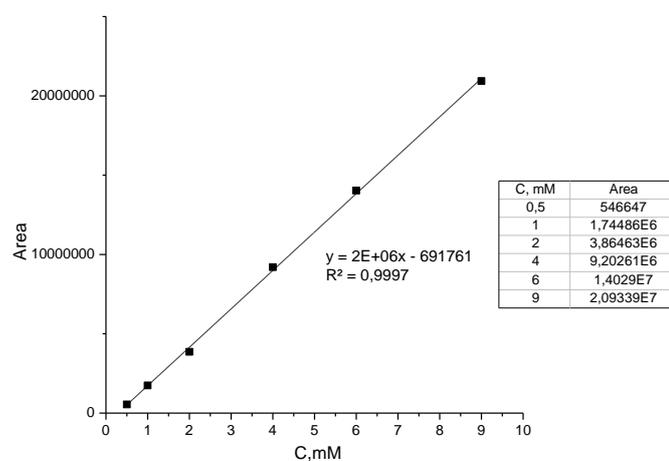


Figure S9. Plot of the GC-MS peak area of *N*-phenyl-1,2,3,4-tetrahydroisoquinoline vs its concentration.

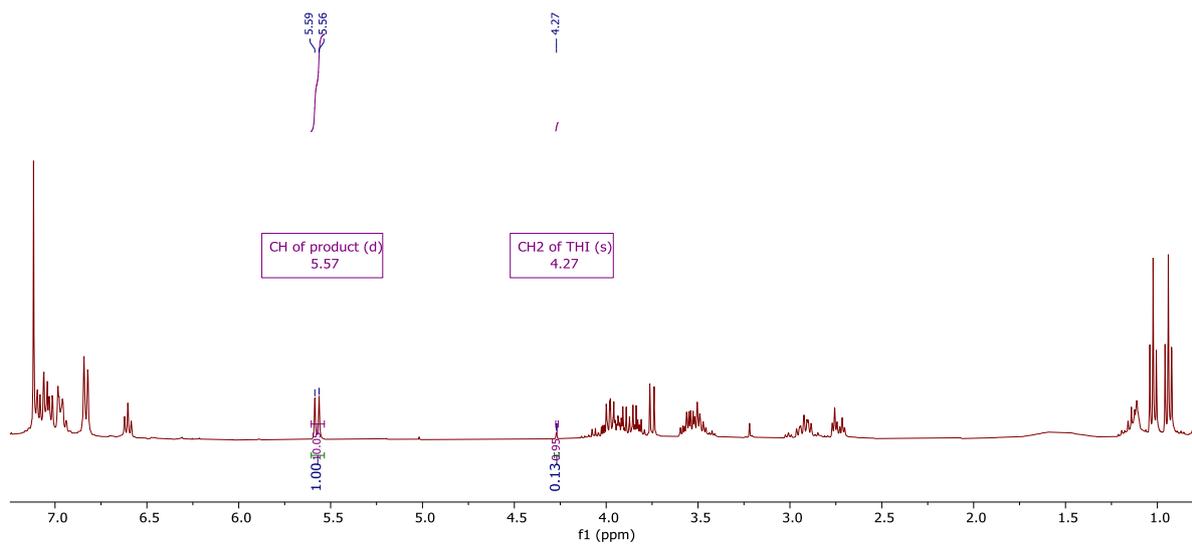


Figure S10. ^1H NMR spectrum of the reaction of THI with malonic ester in the presence of **11b** (CDCl_3).