

SUPPLEMENTAL MATERIAL TO:

**Bioinspired Honokiol Analogs and Their Evaluation for Activity on the Norepinephrine
Transporter**

Kristen Stout^{1,2}, Marketa Bernaskova³, Gary W. Miller^{1,2}, Antje Huefner³ and Wolfgang Schuehly^{4,5}

¹ Rollins School of Public Health, Emory University, 1518 Clifton Road, NE, Claudia Nance Rollins Bldg, Atlanta, GA 30322 (USA)

² Columbia University Mailman School of Public Health, 722 West 168th Street, Room 1411B, New York, NY 10032 (USA)

³ Institute of Pharmaceutical Sciences, Pharmaceutical Chemistry, Universitätsplatz 1, University of Graz, 8010 Graz, Austria

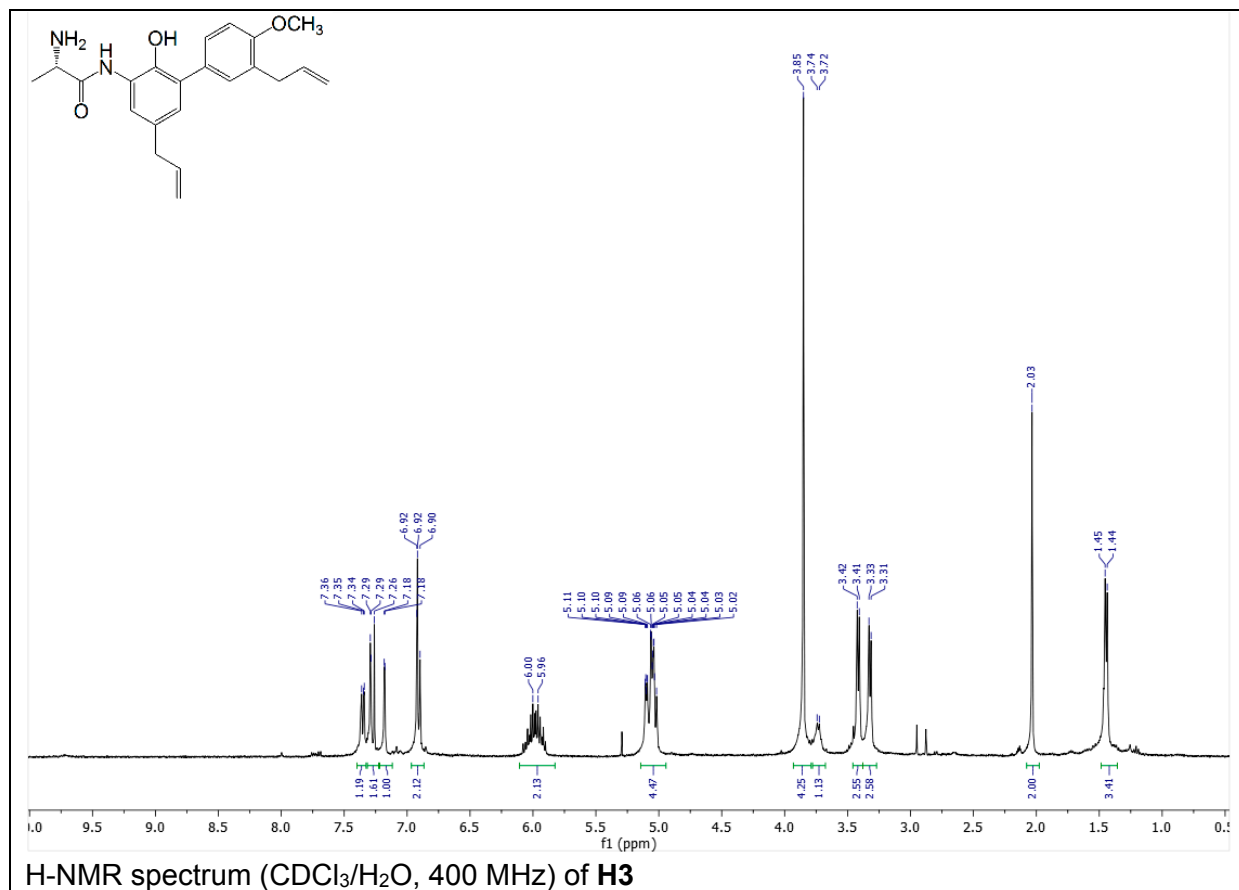
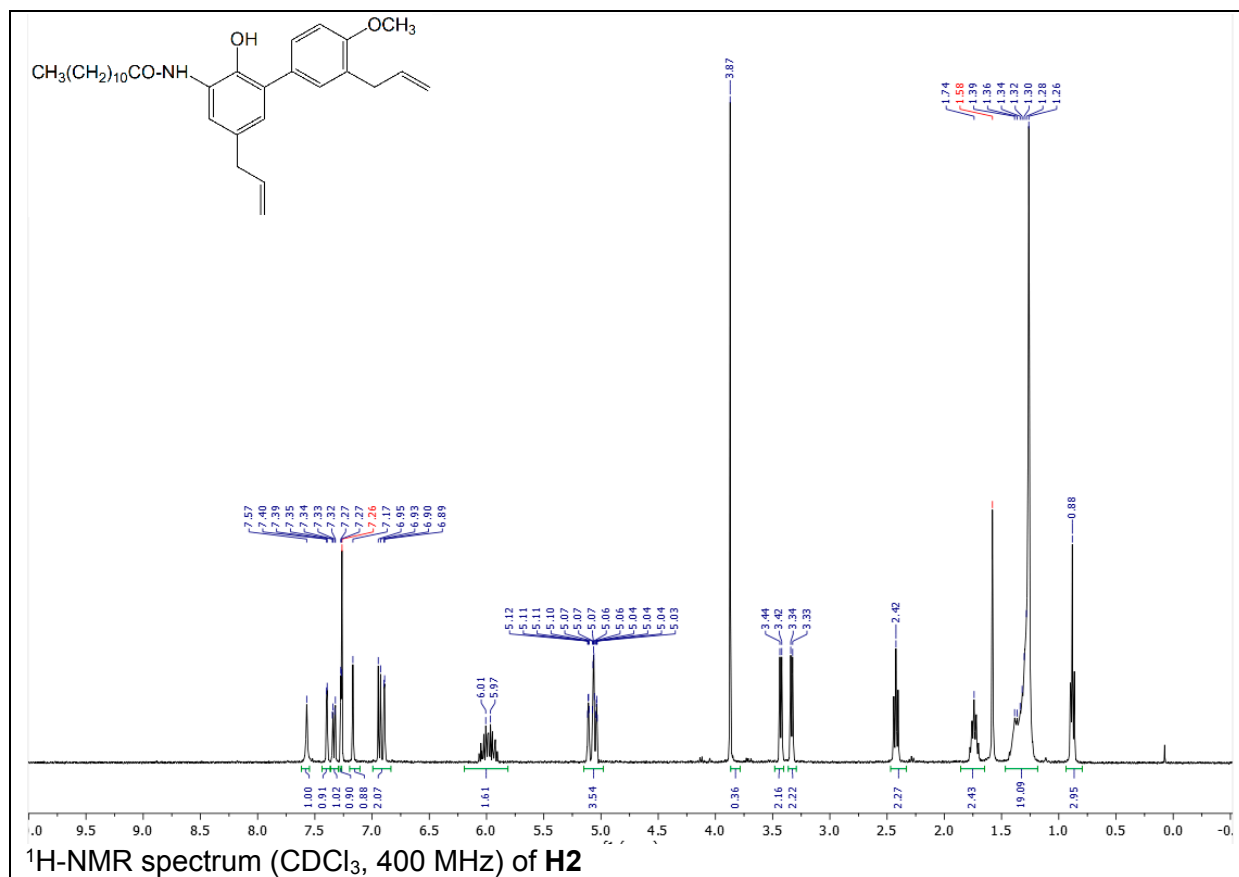
⁴ Institute of Pharmaceutical Sciences, Pharmacognosy, Universitätsplatz 4, University of Graz, 8010 Graz, Austria

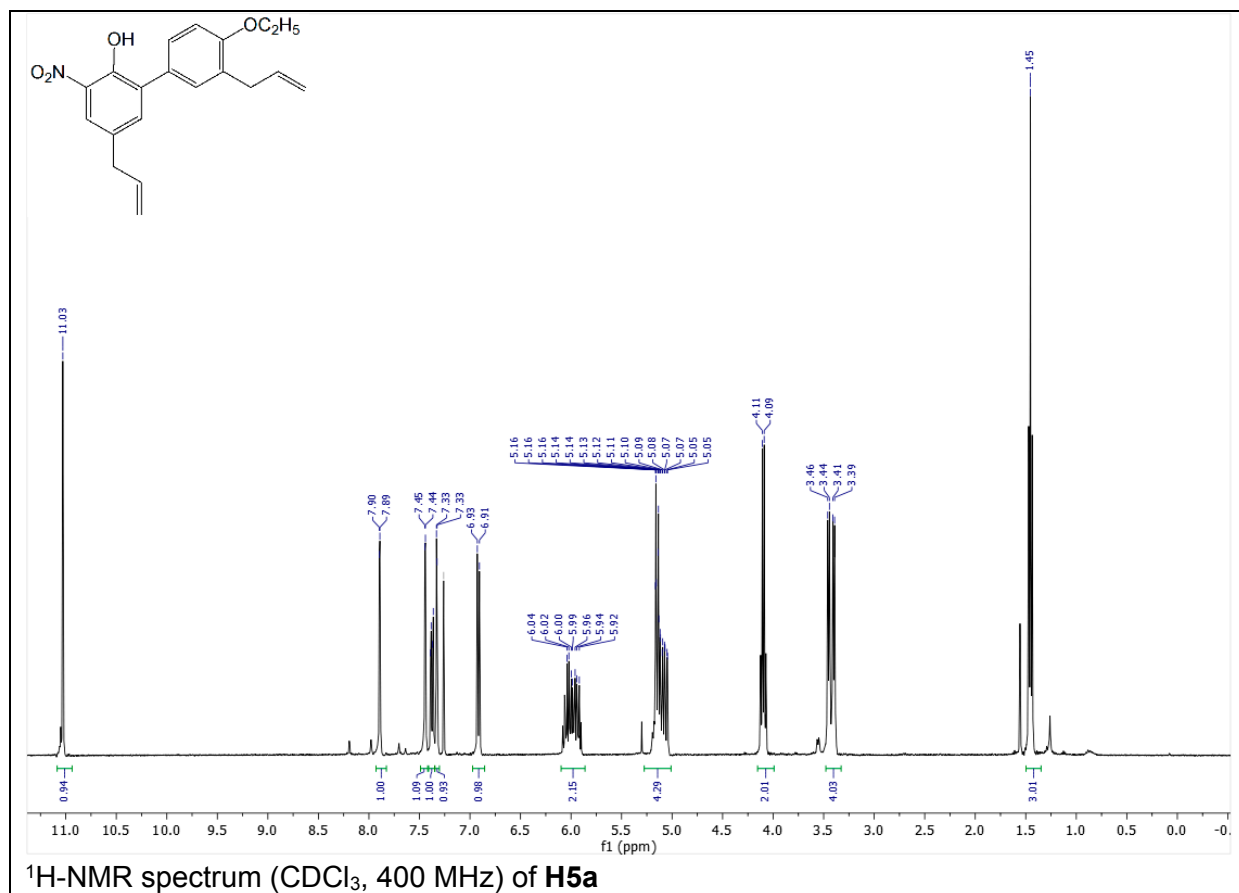
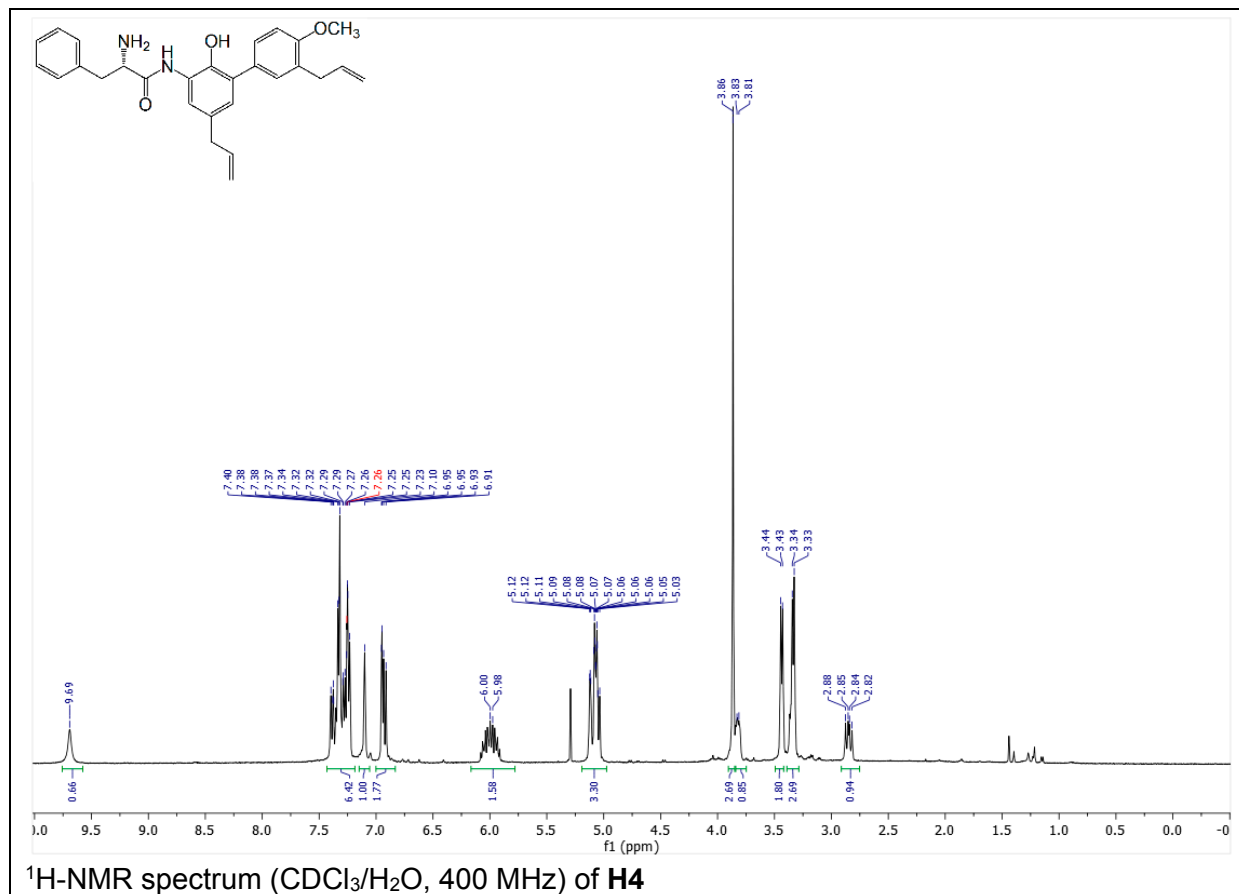
⁵ Institute of Biology, Universitätsplatz 2, University of Graz, 8010 Graz, Austria

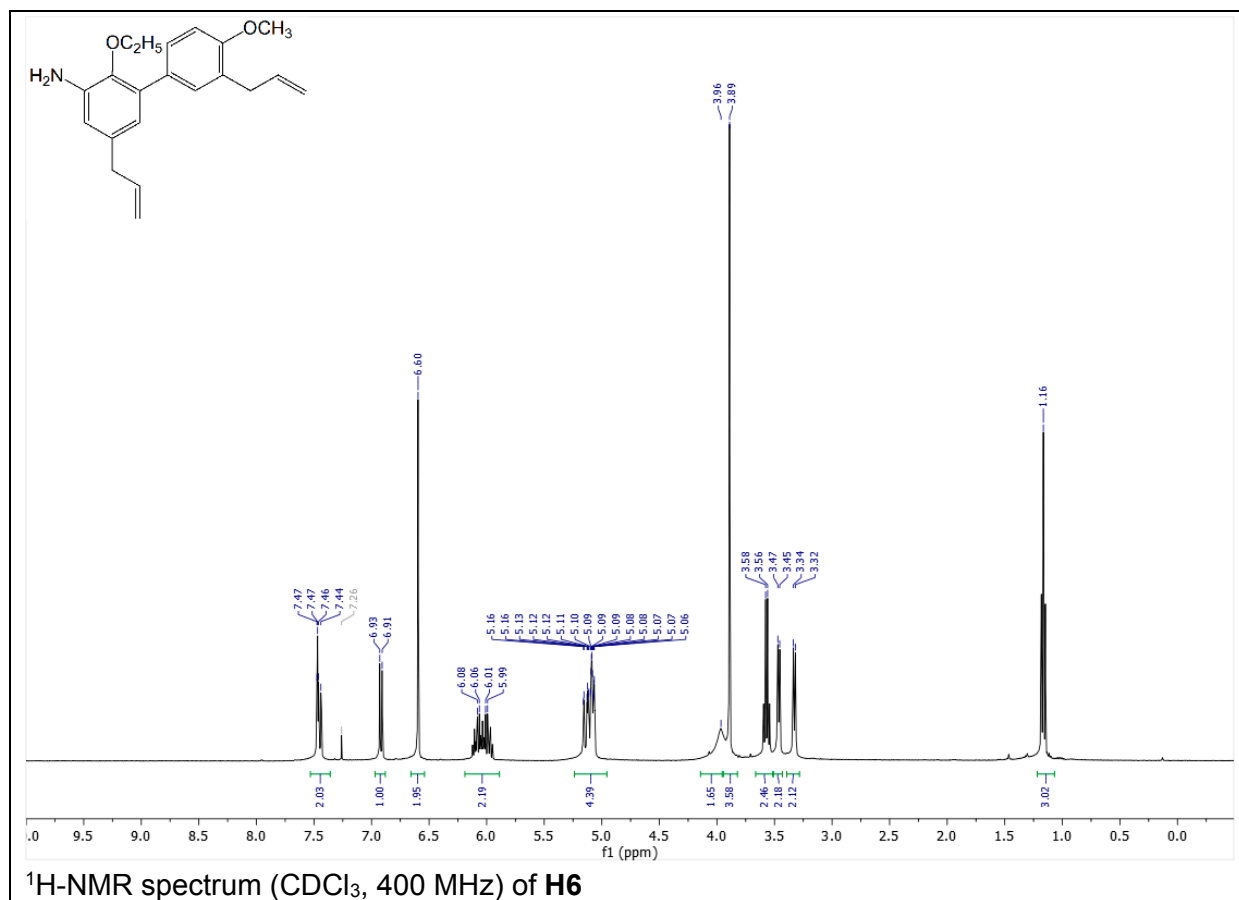
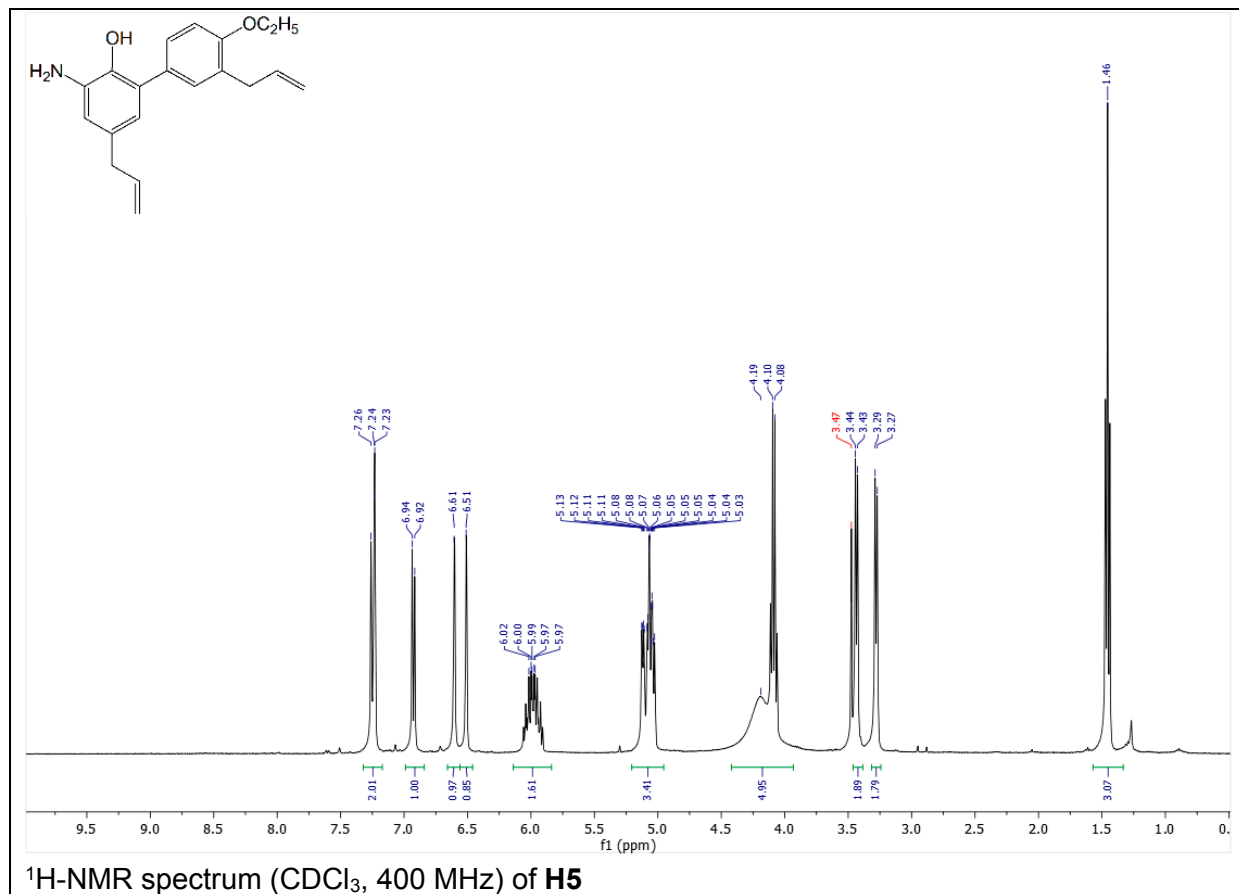
Content of supporting information file:

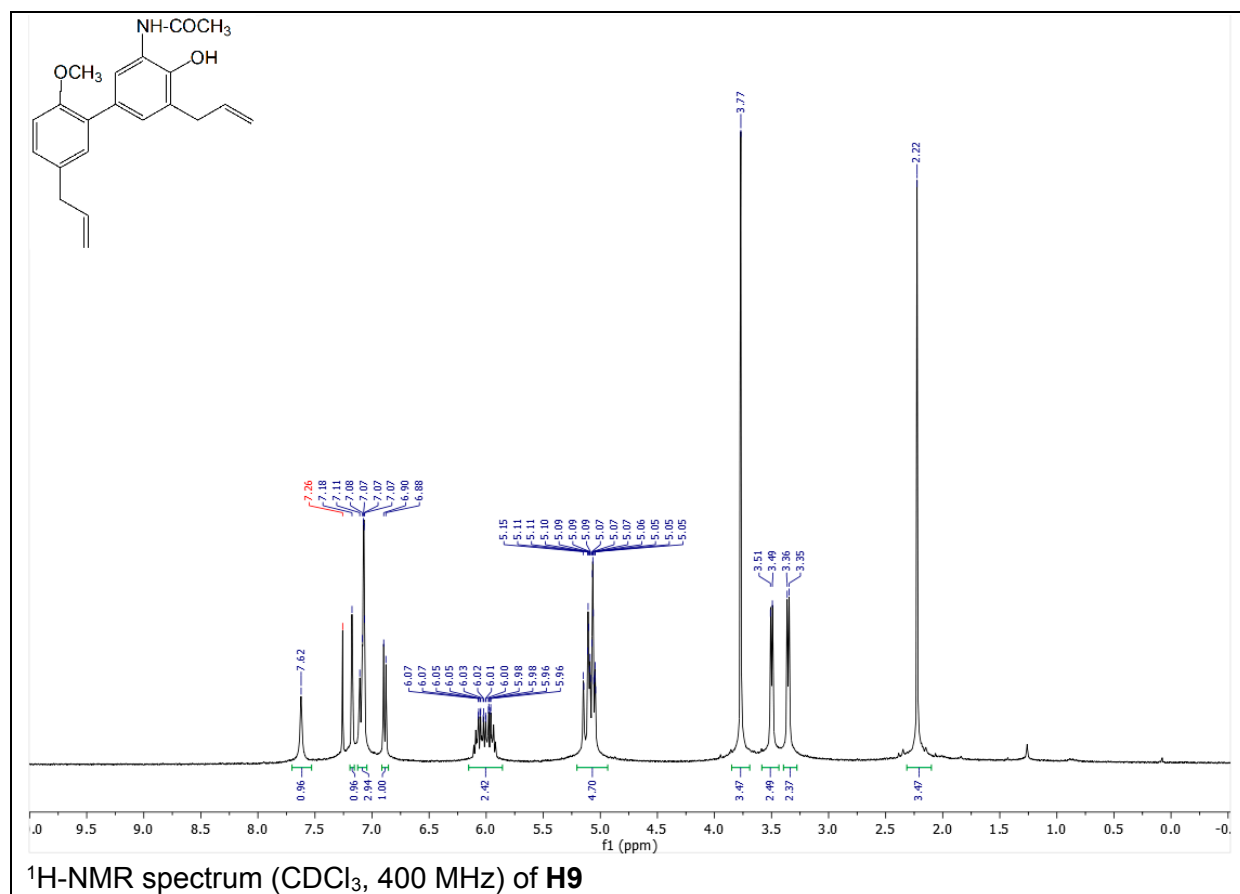
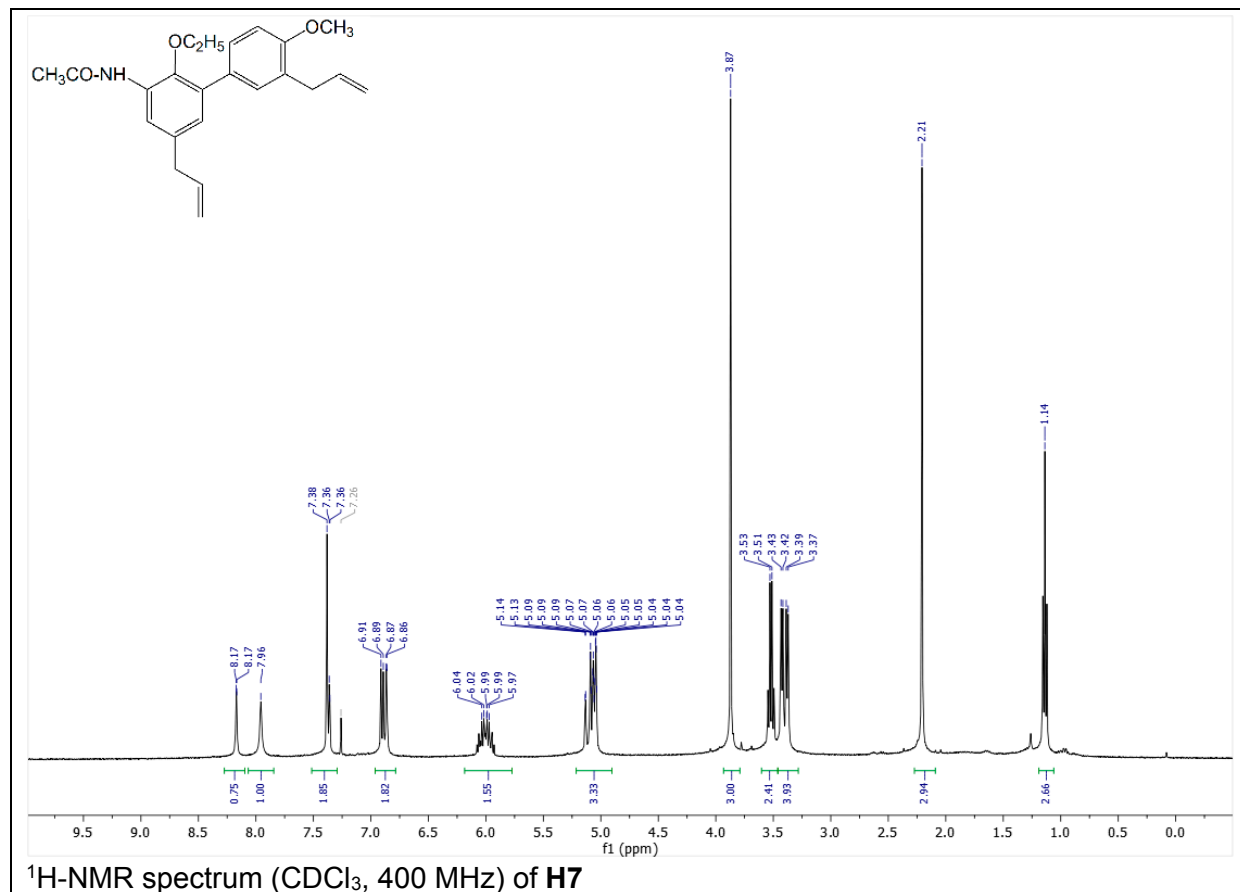
1. ¹H-NMR spectra (CDCl₃, 400 MHz) of the new compounds (page 3-12)
2. Dose-Response (measured as fluorescence) curves for tested compounds (page 13-23)

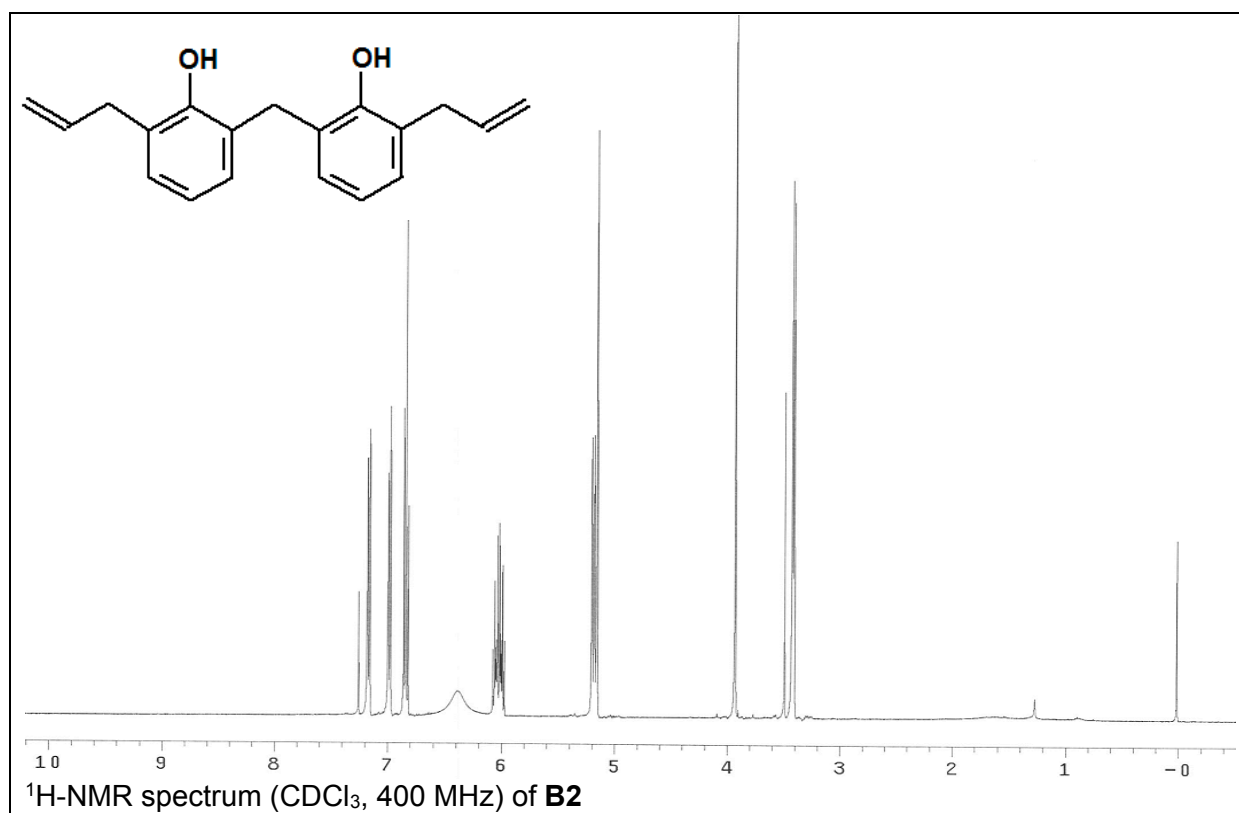
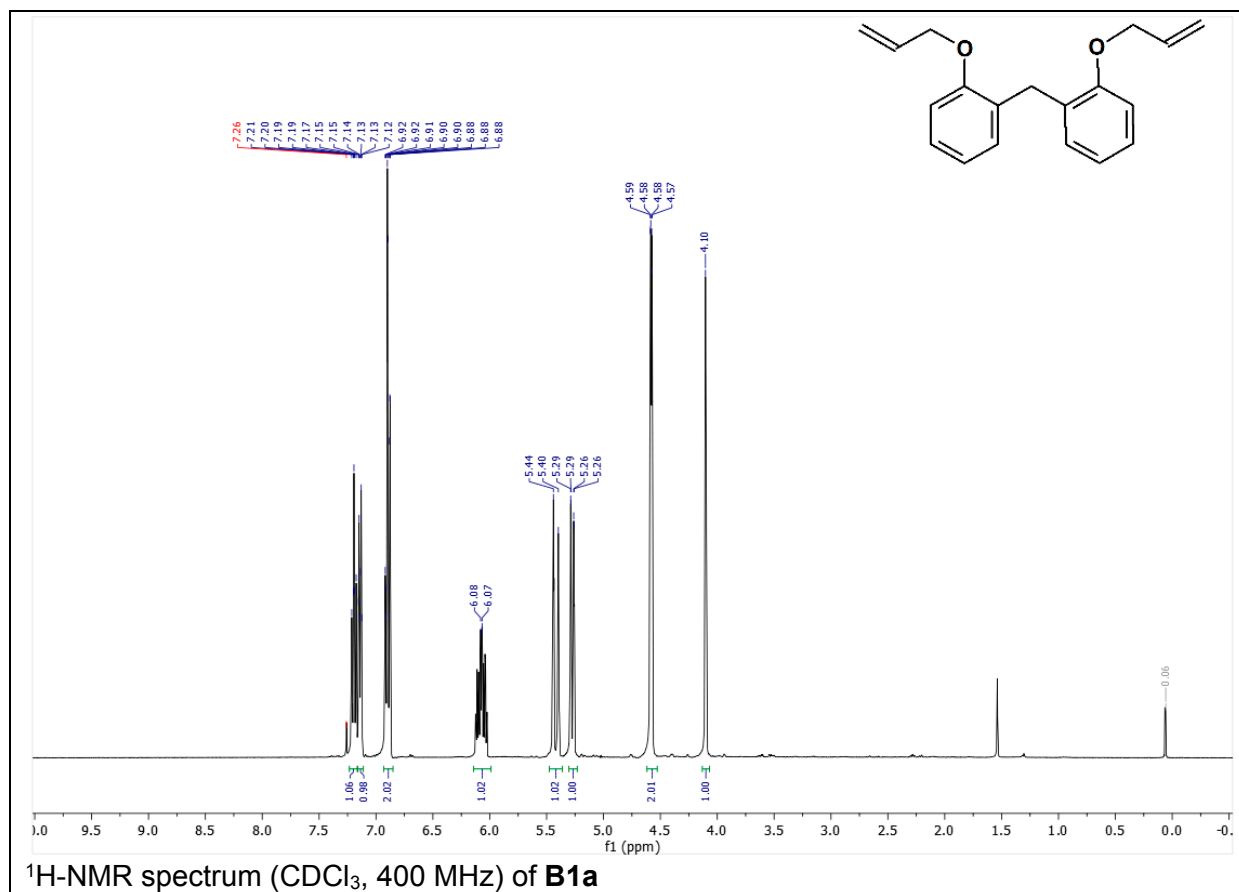
1. ¹H-NMR spectra of the new compounds

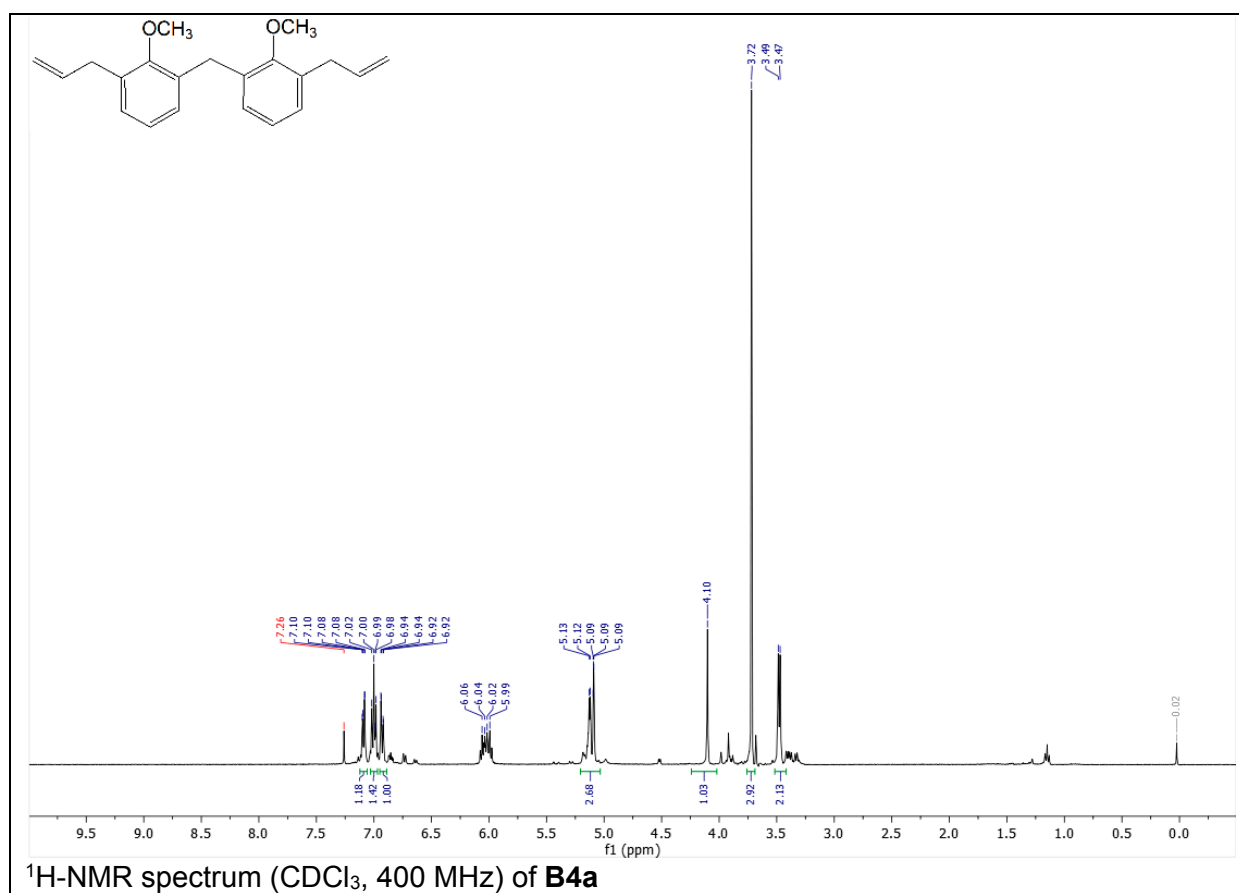
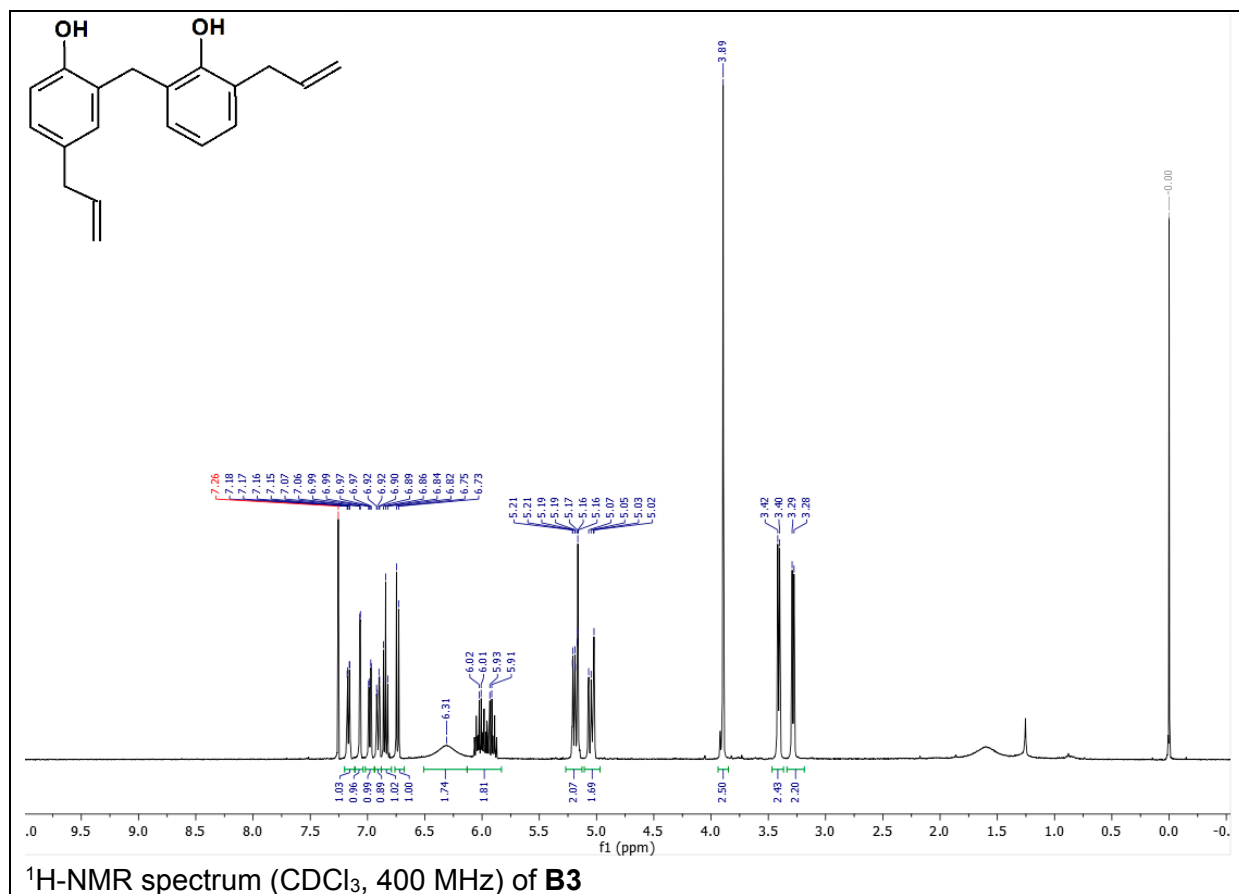


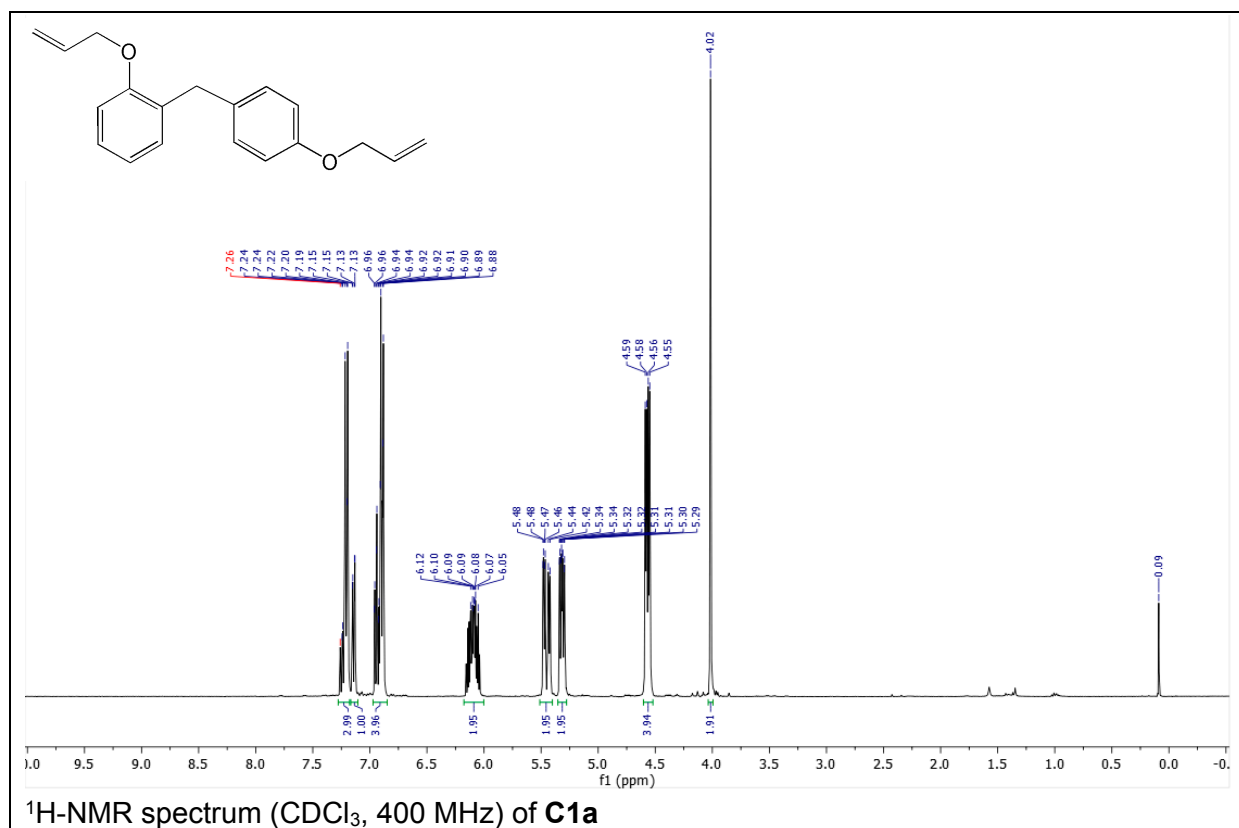
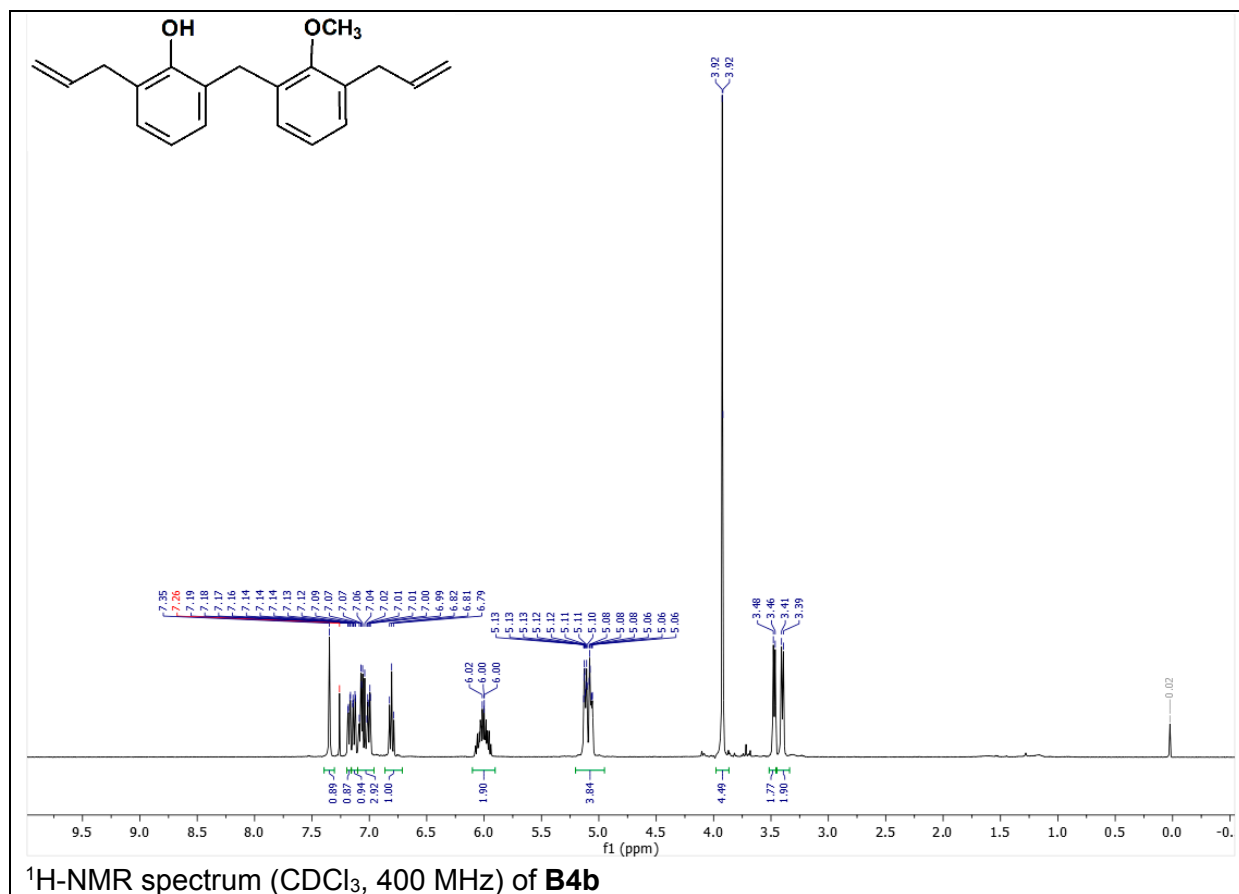


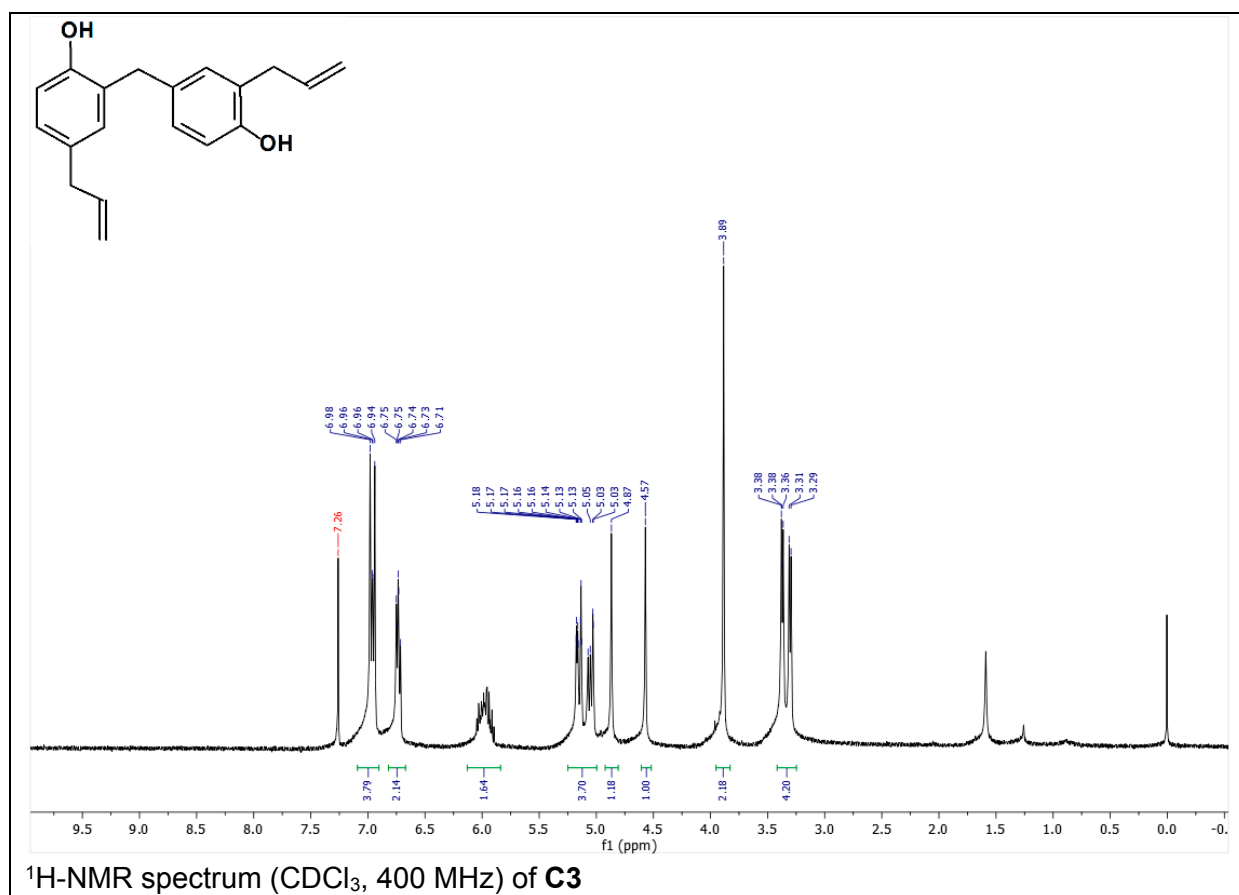
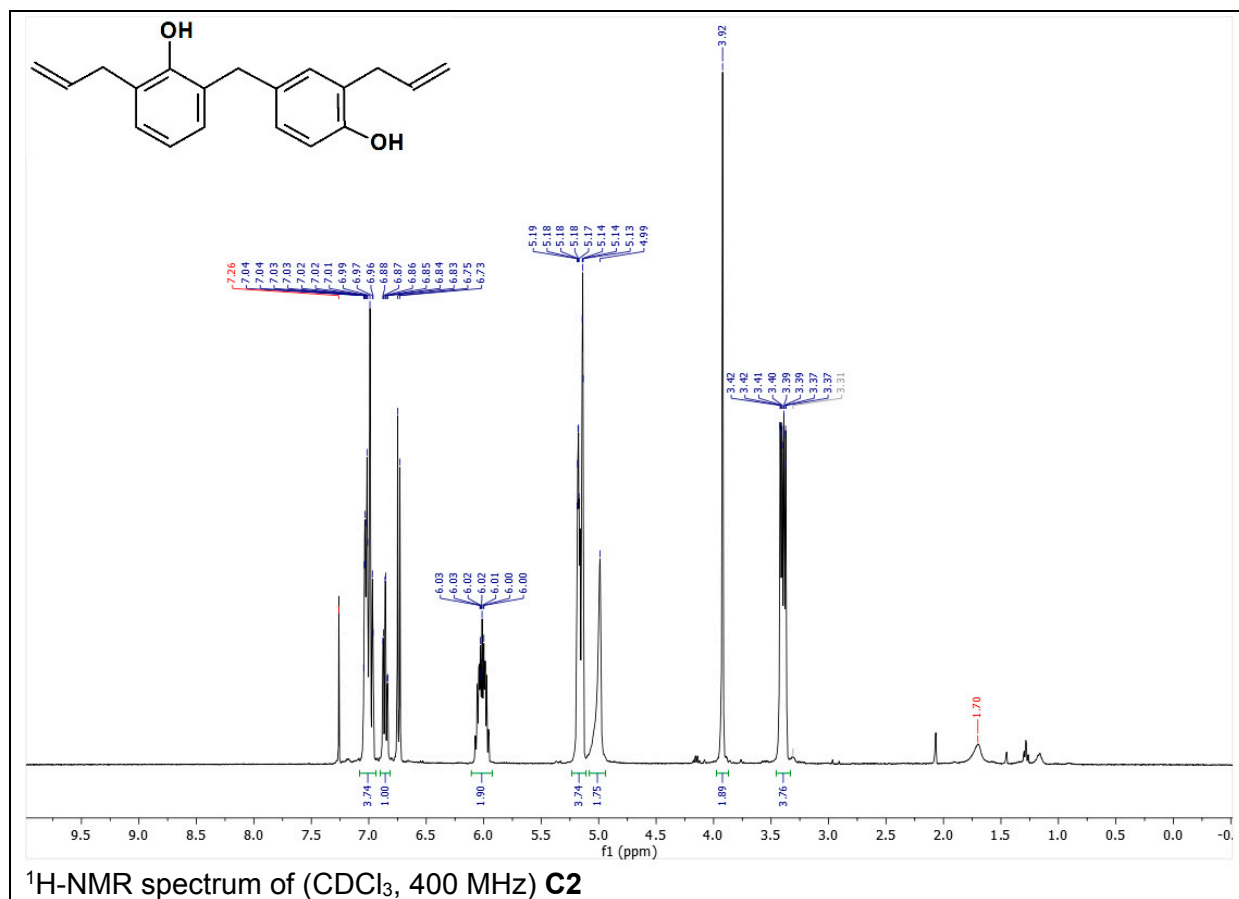


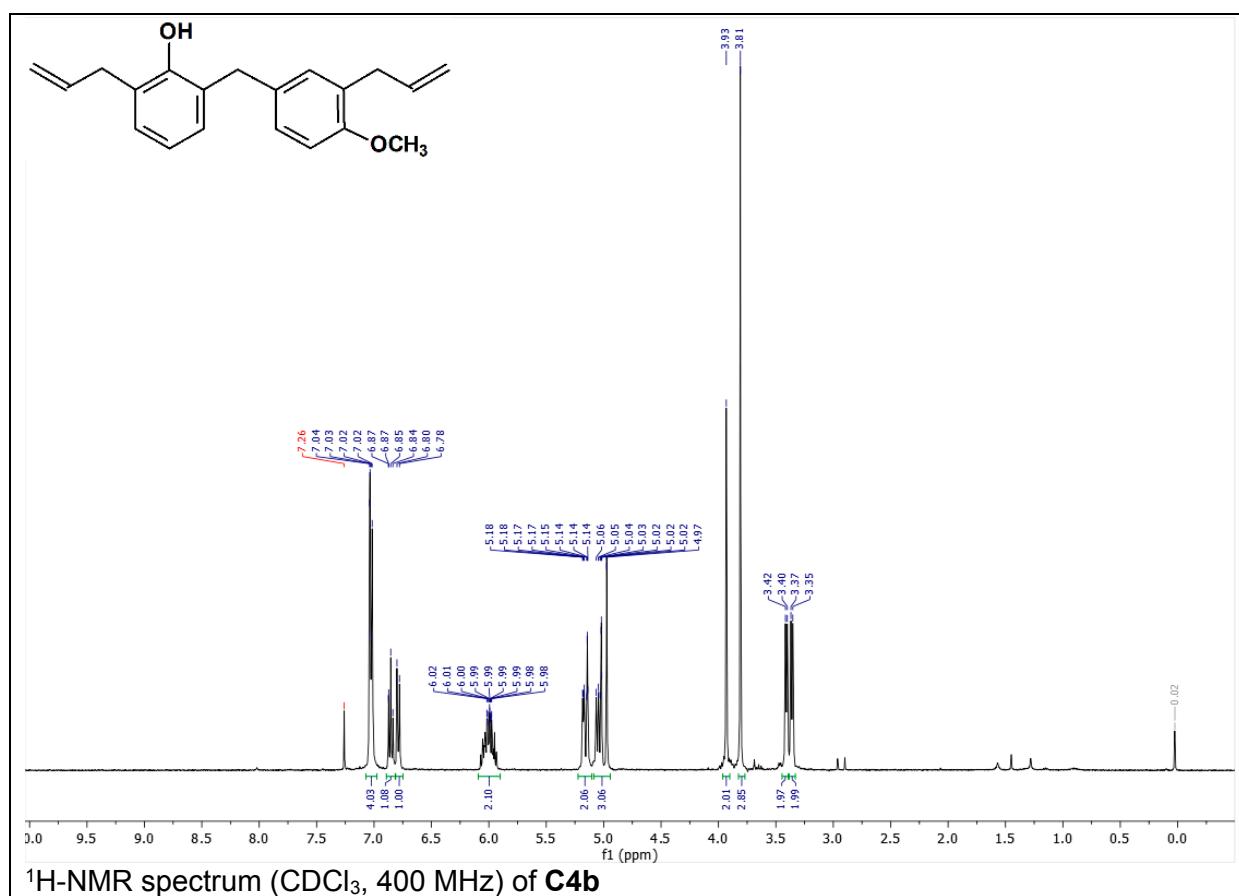
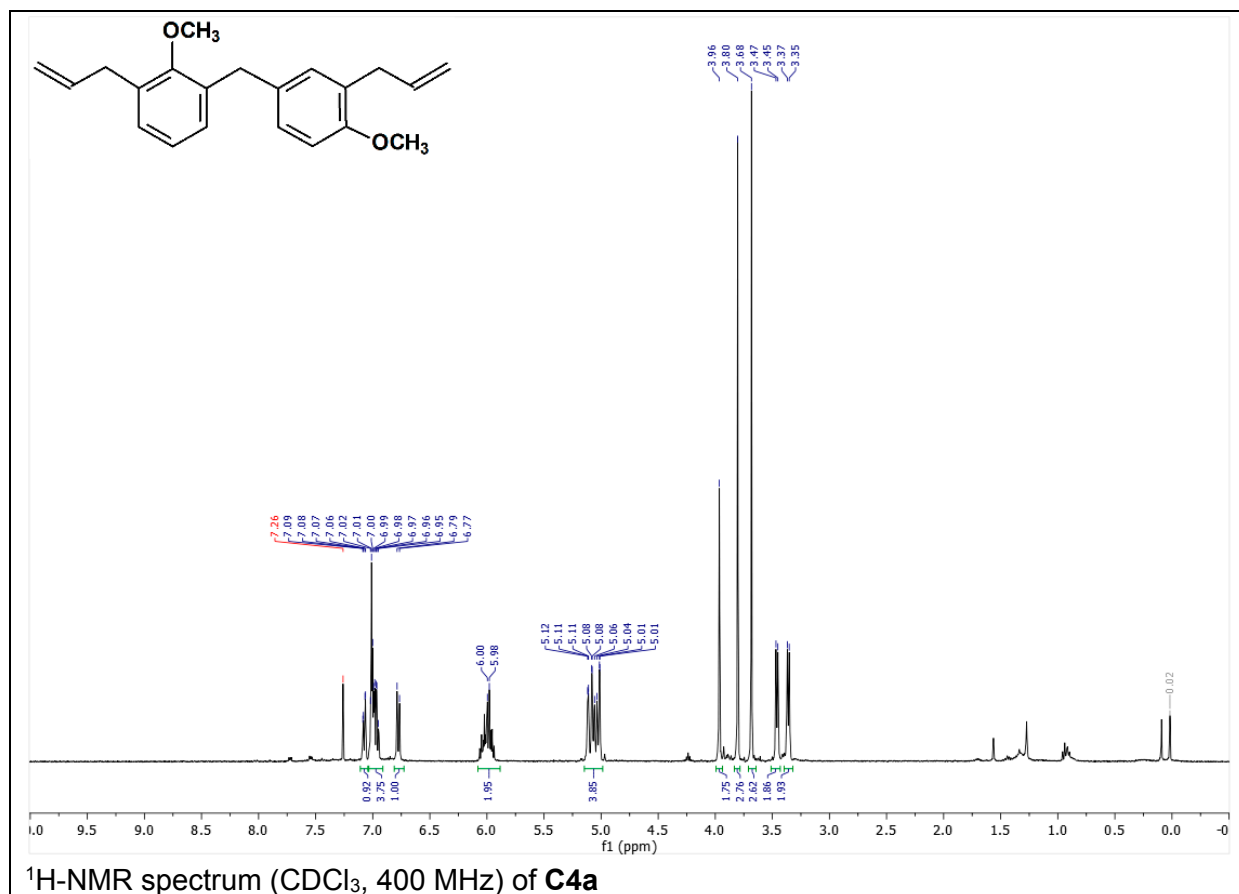


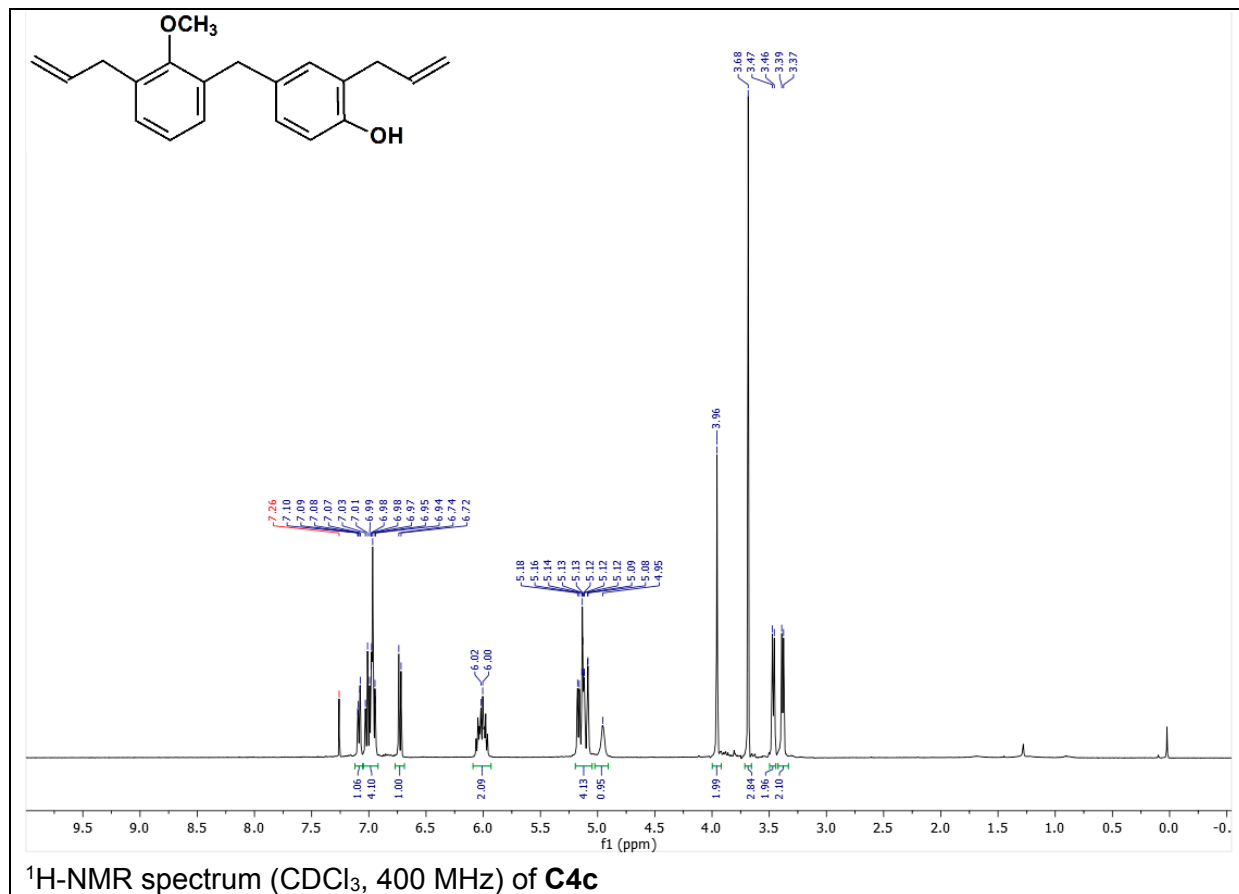








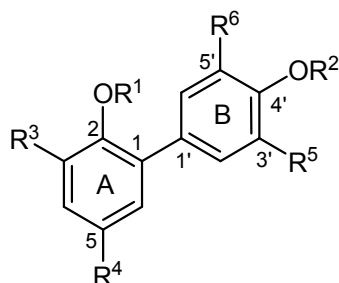




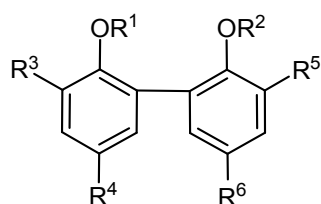
2. Dose-Response (measured as fluorescence) curves for tested compounds

Legend to compound test codes (tables S1 to S5):

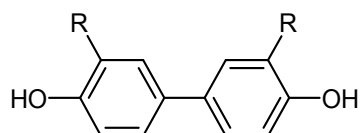
Table S1. Structures of Compounds Based on Honokiol



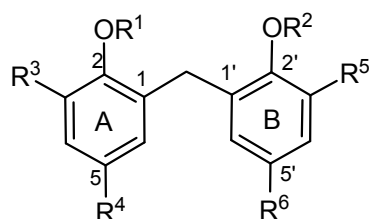
Cpd.	test code	R ¹	R ²	R ³	R ⁴	R ⁵	R ⁶
H	A4	H	H	H	allyl	allyl	H
H1	F1	H	Me	NH ₂	allyl	allyl	H
H2	G5	H	Me	NH-COC ₁₁ H ₂₃	allyl	allyl	H
H3	G6	H	Me	NH-Ala	allyl	allyl	H
H4	G7	H	Me	NH-Phe	allyl	allyl	H
H5	F4	H	Et	NH ₂	allyl	allyl	H
H6	F5	Et	Me	NH ₂	allyl	allyl	H
H7	F6	Et	Me	NH-Ac	allyl	allyl	H
H8	G1	H	Me	NH-Ac	allyl	allyl	H
H9	G2	Me	H	H	allyl	allyl	NH-Ac
H10	E2	H	Et	H	allyl	allyl	H
H11	F7	Me	H	H	allyl	allyl	NH ₂
H12	B5	H	H	H	allyl	1-propenyl	H
H13	C1	H	H	H	<i>n</i> -propyl	<i>n</i> -propyl	H
H14	B2	Me	H	H	allyl	allyl	H
H15	B1	H	Me	H	allyl	allyl	H
H16	B7	Me	Me	H	allyl	allyl	H
H17	B4	H	Me	H	allyl	1-propenyl	H
H18	B6	H	Me	H	2,3-dihydroxy-propyl	2,3-dihydroxy-propyl	H
H19	B3	H	Me	H	<i>n</i> -propyl	<i>n</i> -propyl	H
H20	B8	Me	Me	H	<i>n</i> -propyl	<i>n</i> -propyl	H
H21	E1	Et	-	H	allyl	allyl	H
H22	E3	H	Et	H	allyl	allyl	H
H23	E4	Et	H	H	<i>n</i> -propyl	<i>n</i> -propyl	H
H24	E5	Et	Et	H	<i>n</i> -propyl	<i>n</i> -propyl	H
H25	C2	H	Me	H	2-bromo-propyl	allyl	H
H26	E6	Me	H	H	allyl	allyl	NO ₂
H27	E7	Me	H	H	<i>n</i> -propyl	<i>n</i> -propyl	NO ₂
H28	E8	H	Me	NO ₂	allyl	allyl	H
H29	F2	Me	H	H	<i>n</i> -propyl	<i>n</i> -propyl	NH ₂
H30	F3	H	Me	NH ₂	<i>n</i> -propyl	<i>n</i> -propyl	H
H31	G3	Me	H	H	<i>n</i> -propyl	<i>n</i> -propyl	NH-Ac
H32	G4	H	Me	NH-Ac	<i>n</i> -propyl	<i>n</i> -propyl	H

Table S2. Structures of Compounds Based on Biphenyl-2,2'-diol

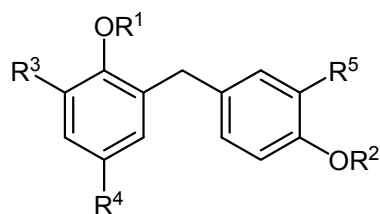
Cpd.	test code	R ¹	R ²	R ³	R ⁴	R ⁵	R ⁶
M	A3	H	H	H	allyl	H	allyl
M1	A1	H	H	H	H	H	H
M2	A6	H	H	H	<i>n</i> -propyl	H	<i>n</i> -propyl
M3	A7	Me	H	H	allyl	H	allyl
M4	A8	Me	Me	H	allyl	H	allyl
M5	C5	H	H	H	Me	H	Me
M6	C6	H	H	H	<i>t</i> -butyl	H	<i>t</i> -butyl
M7	C4	H	H	allyl	H	allyl	H

Table S3. Structures of Compounds Based on Biphenyl-4,4'-diol

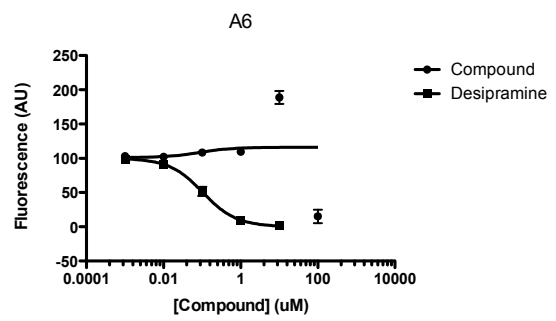
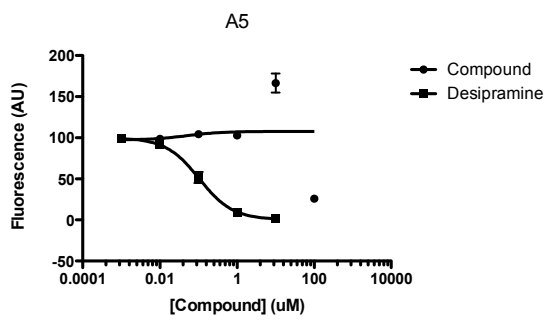
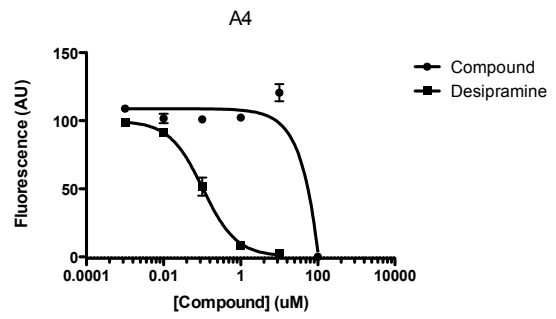
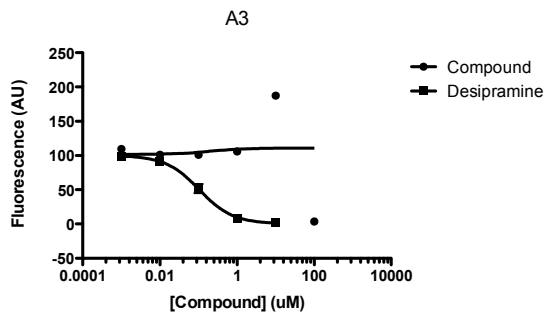
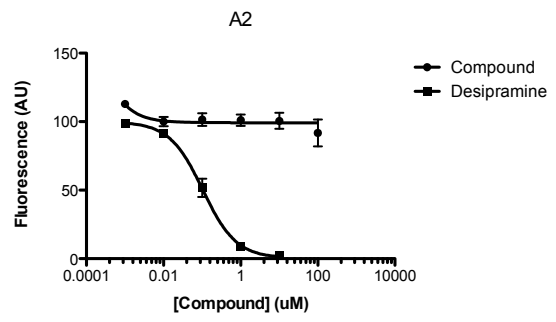
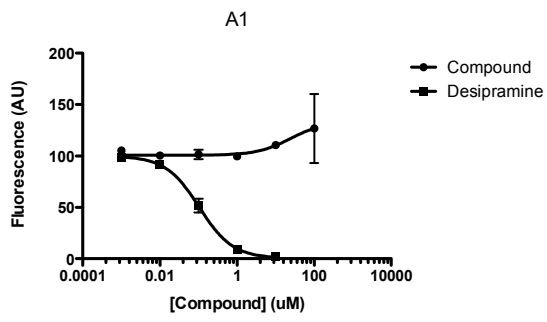
Cpd.	test code	R
A1	A2	H
A2	C5	allyl

Table S4. Structures of Compounds Based on bis(2-hydroxyphenyl)methane

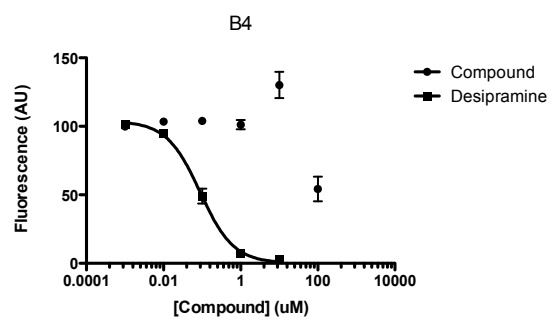
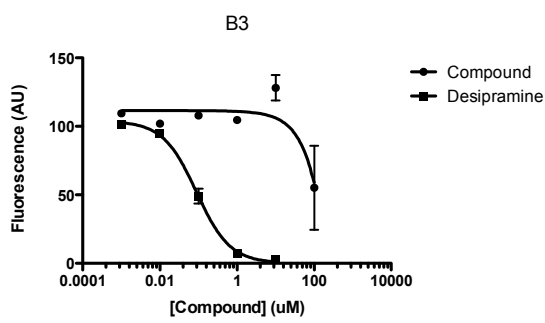
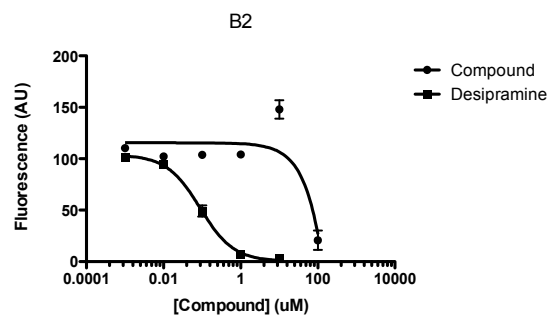
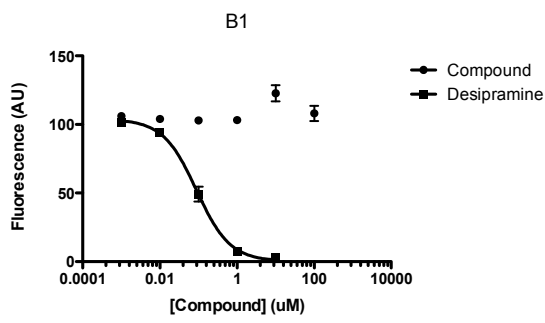
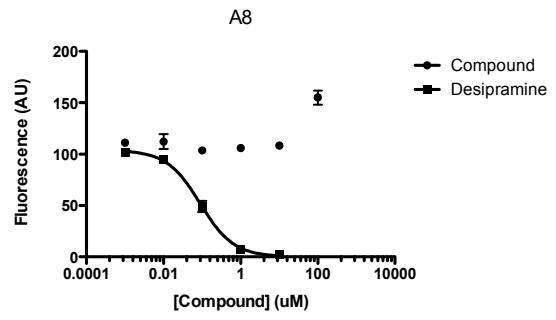
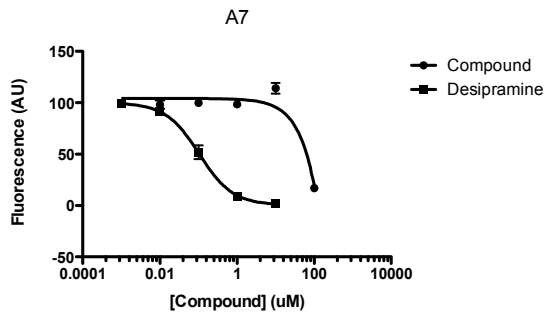
Cpd.	test code	R ¹	R ²	R ³	R ⁴	R ⁵	R ⁶
B1	D1	H	H	H	H	H	H
B2	D4	H	H	allyl	H	allyl	H
B4b	D5	Me	H	allyl	H	allyl	H
B4a	D6	Me	Me	allyl	H	allyl	H

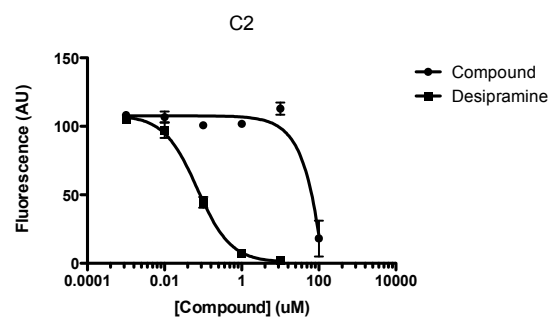
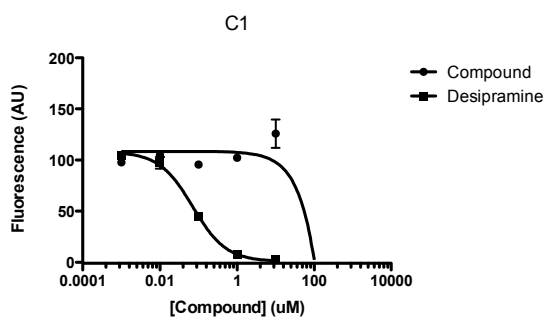
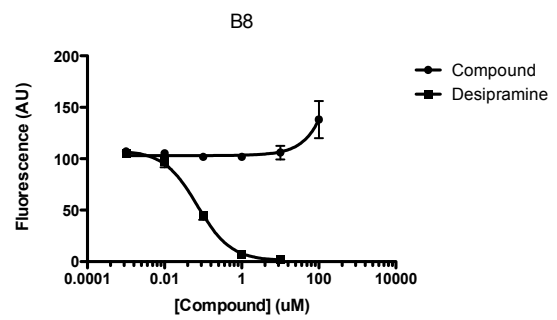
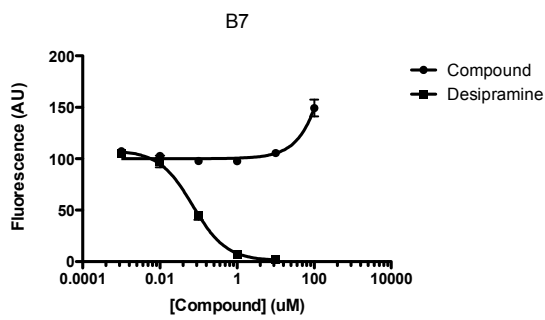
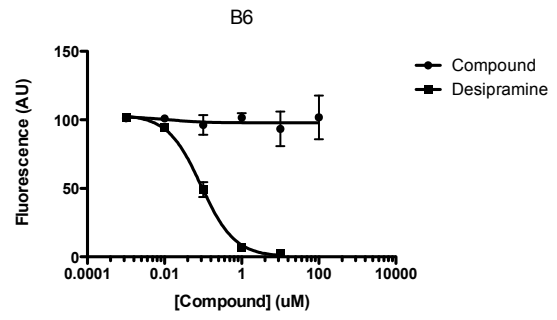
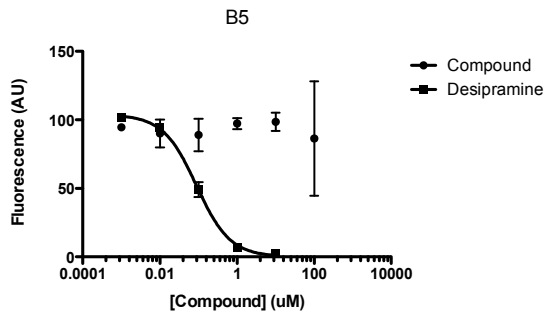
Table S5. Structures of Compounds Based on 2,4'-dihydroxydiphenylmethane

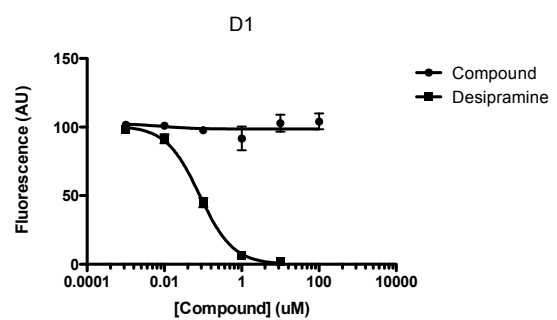
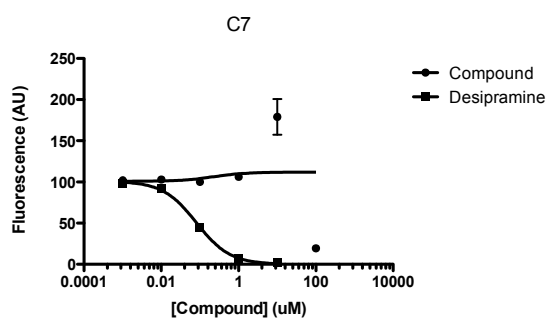
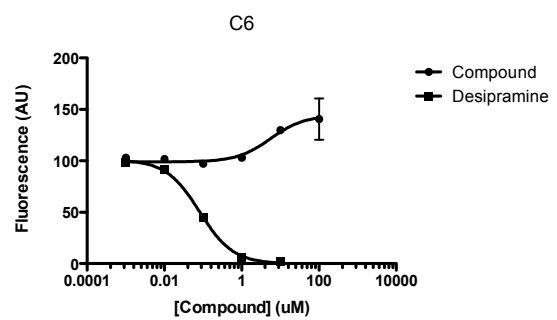
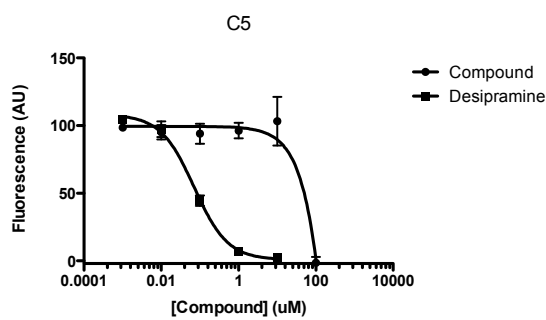
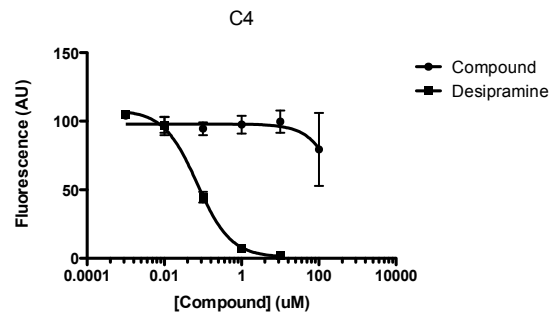
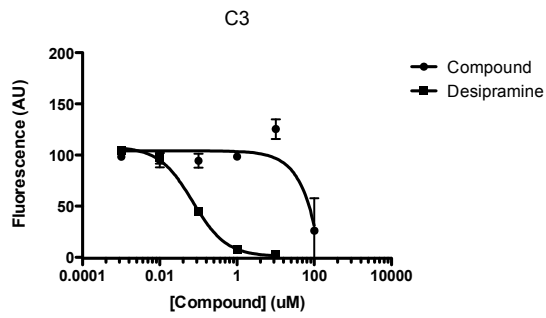
Cpd.	test code	R ¹	R ²	R ³	R ⁴	R ⁵
C1	D2	H	H	H	H	H
C2	D3	H	H	allyl	H	allyl
C4c	D8	Me	H	allyl	H	allyl
C4b	D7	H	Me	allyl	H	allyl
C4a	D9	Me	Me	allyl	H	allyl



A5 does not belong to the compounds of this article







C3 does not belong to the compounds of this article

