

Supporting information

Regioselective synthesis of 5-[(2,3-dihydroxypropoxy)methyl]uracil analogues

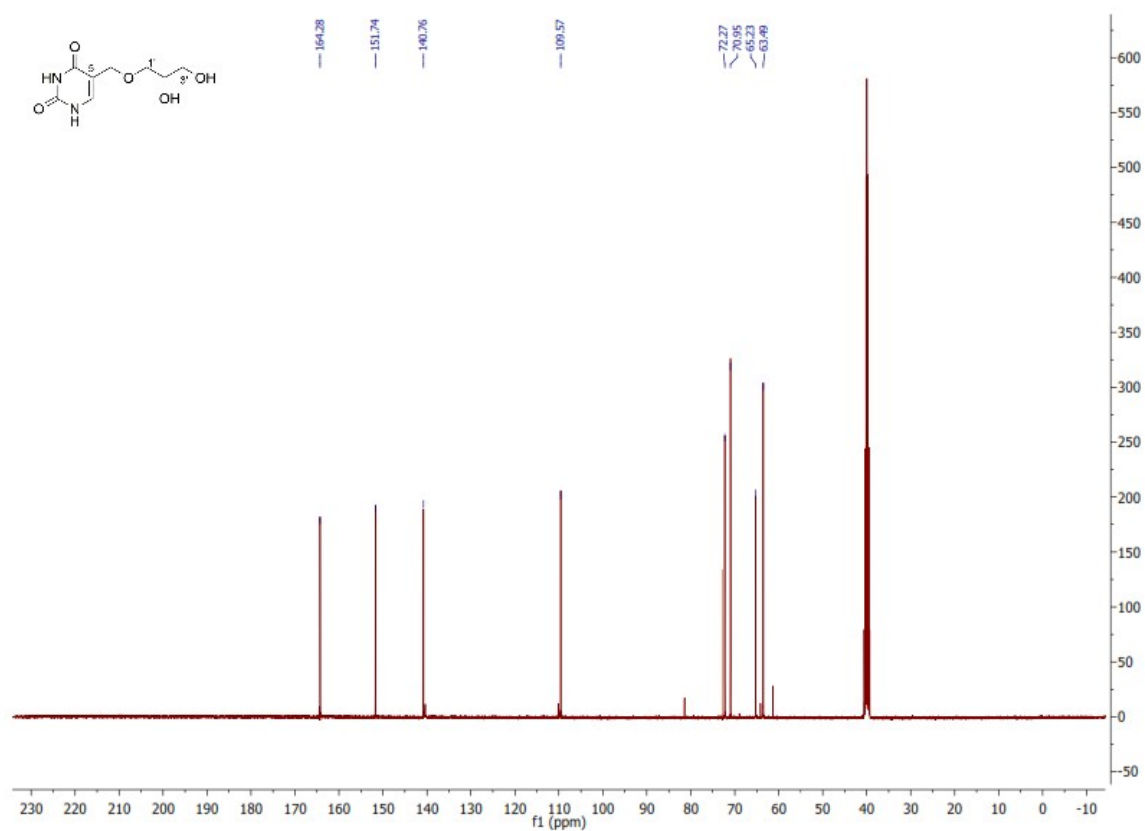
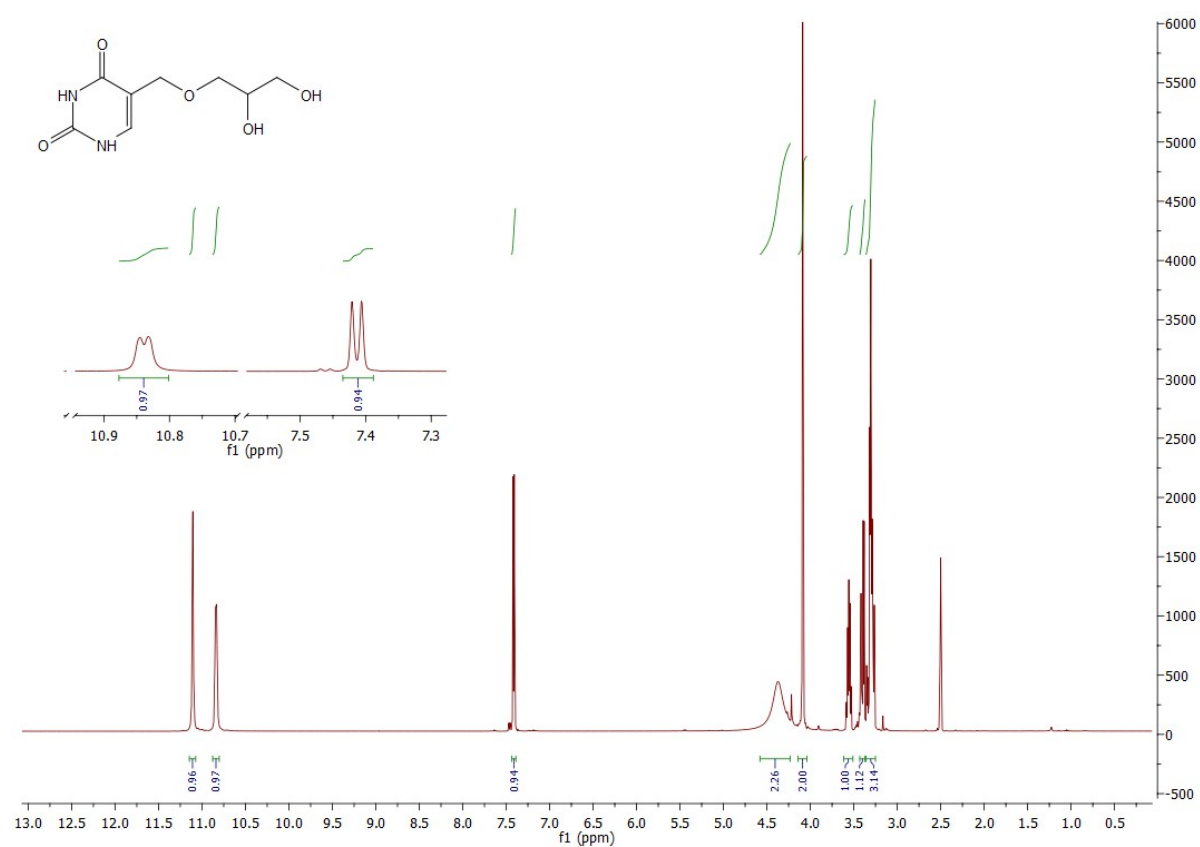
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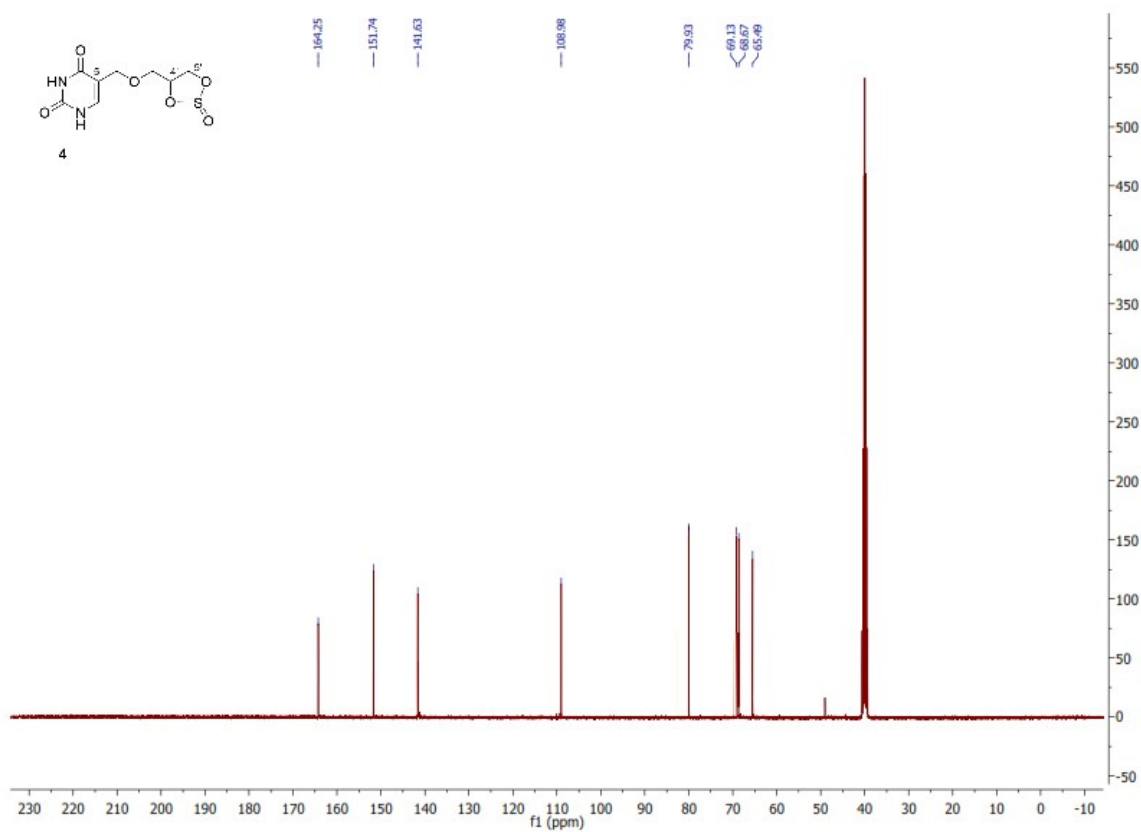
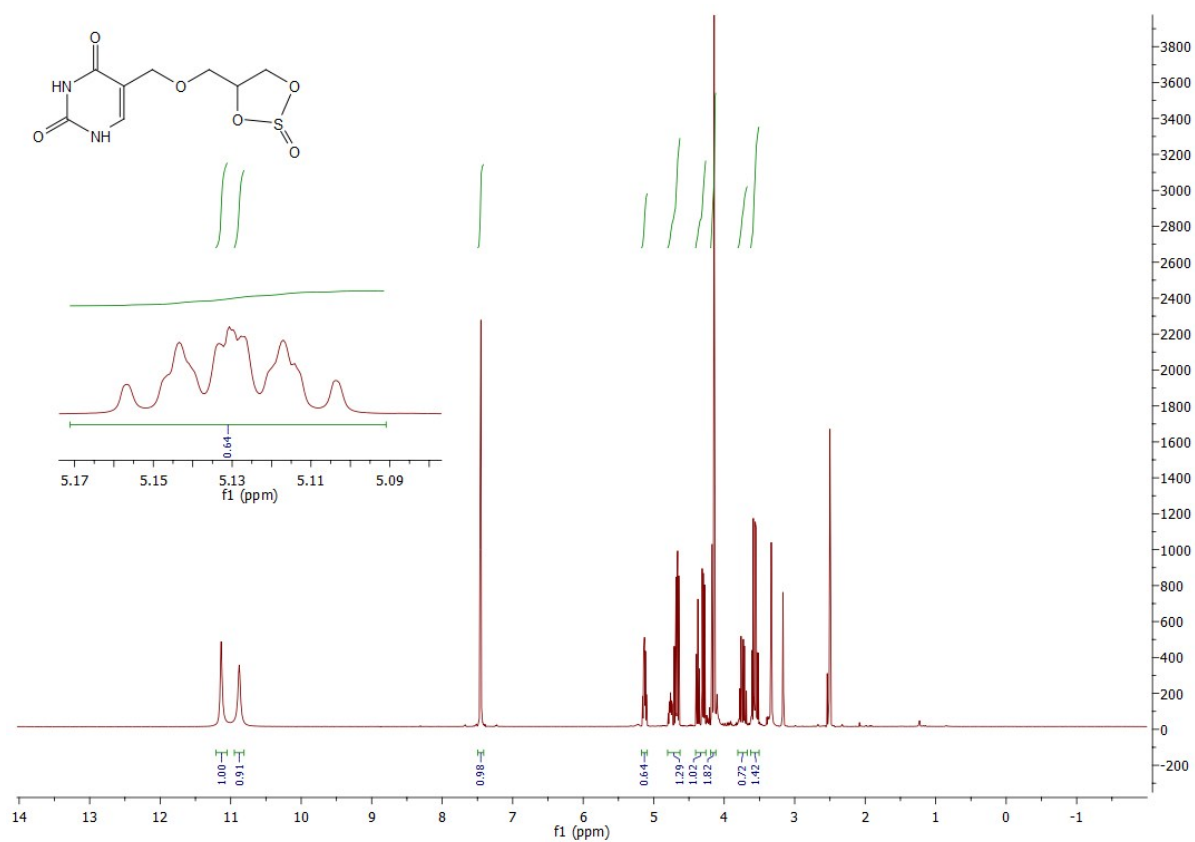
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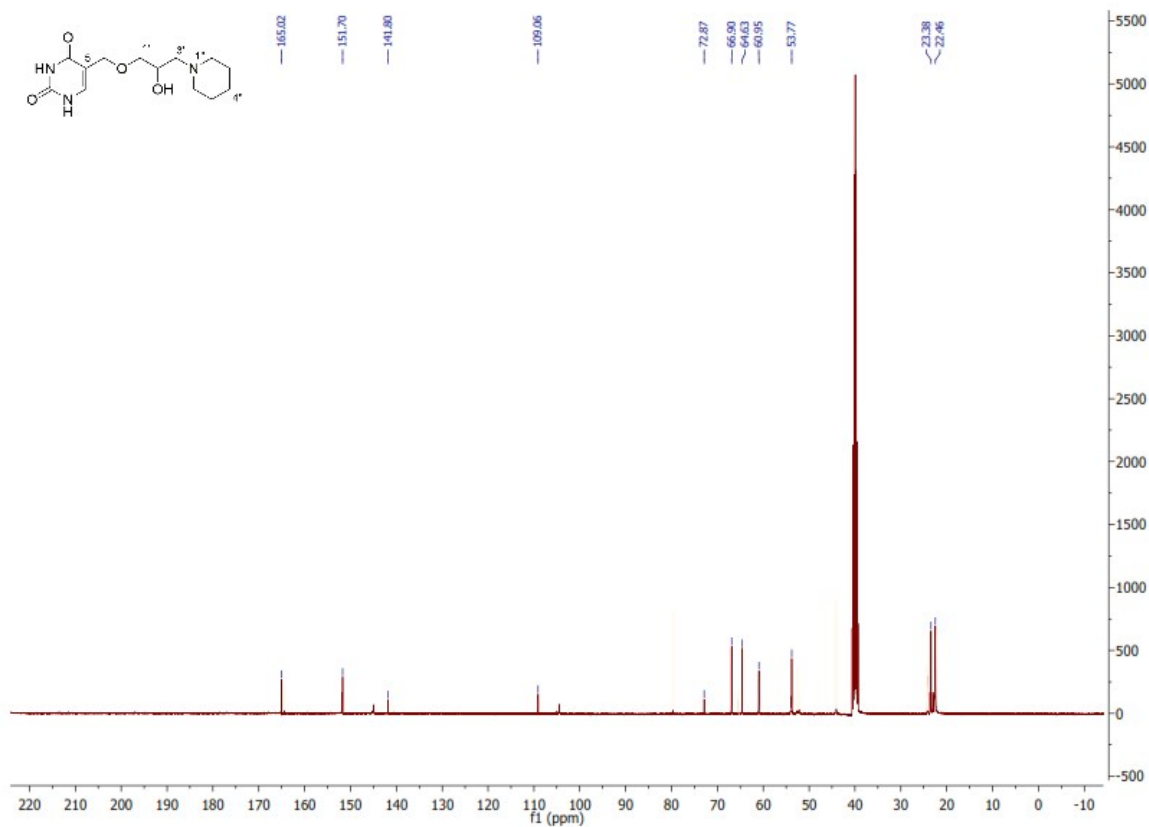
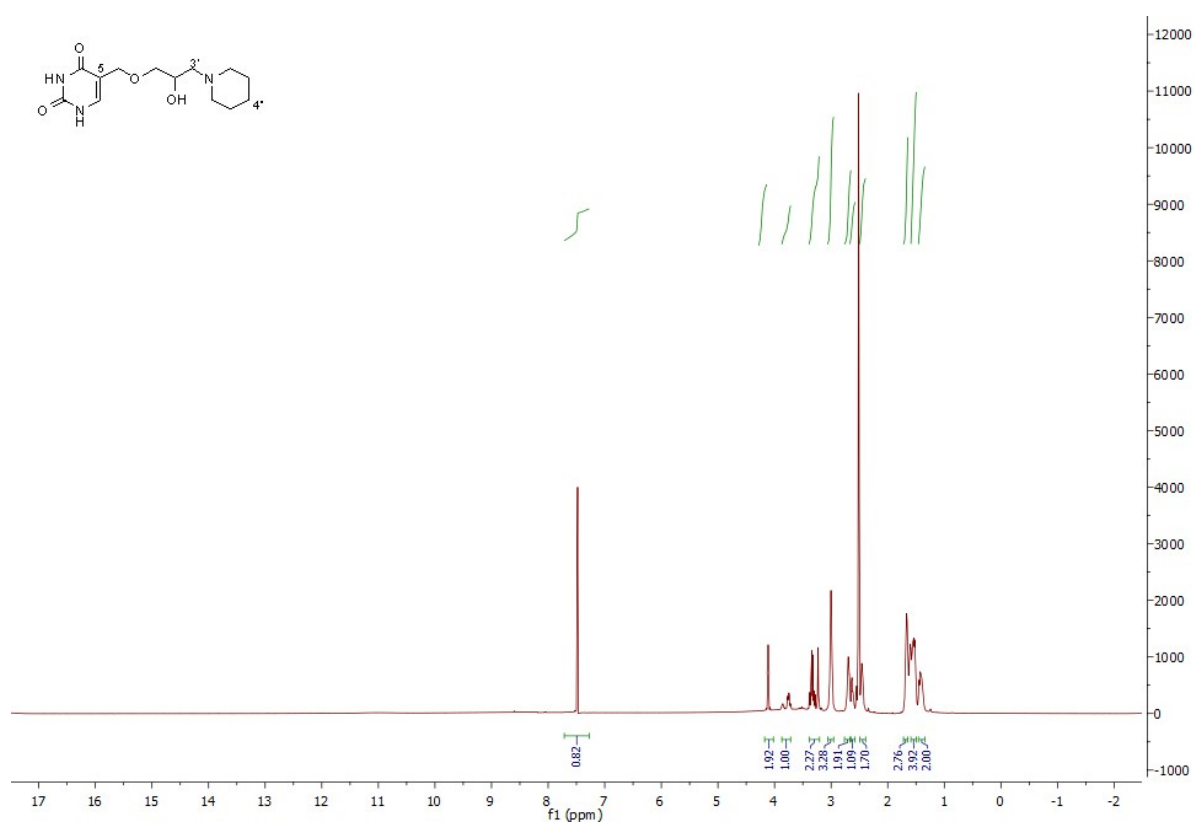
5-((2,3-Dihydroxypropoxy)methyl)pyrimidine-2,4(1*H*,3*H*)-dione (3)



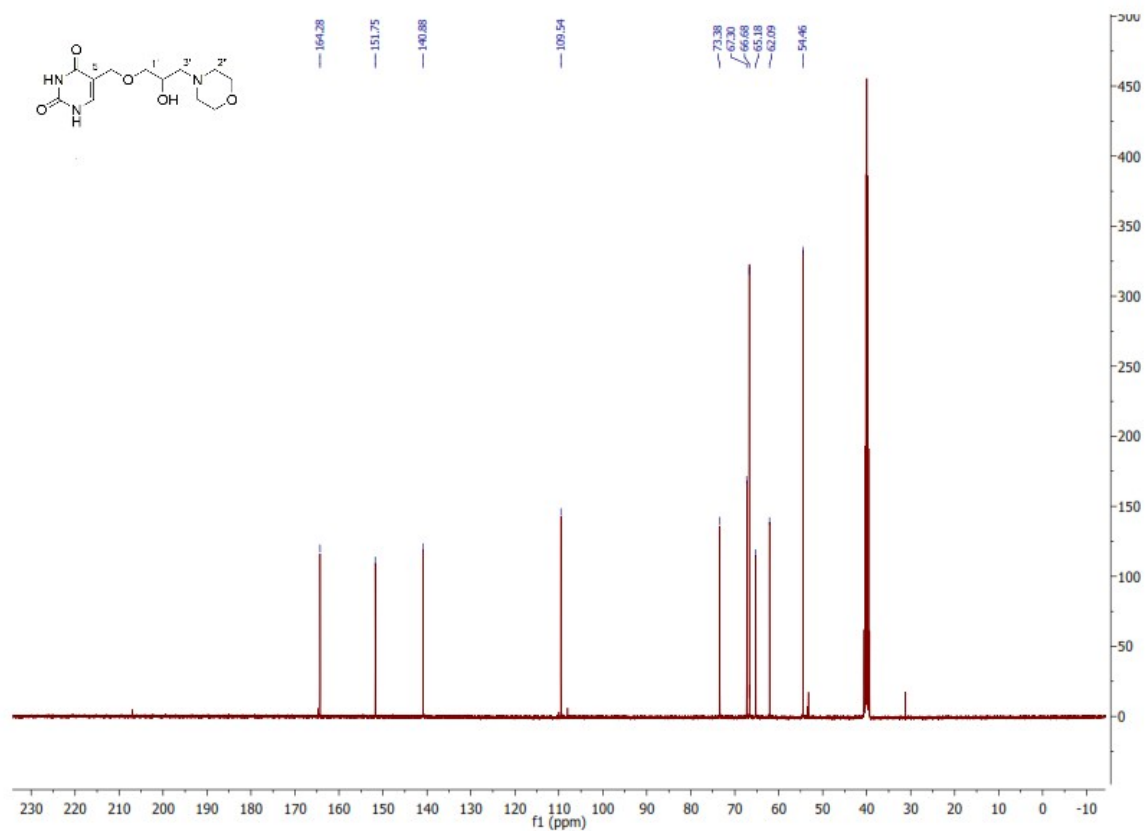
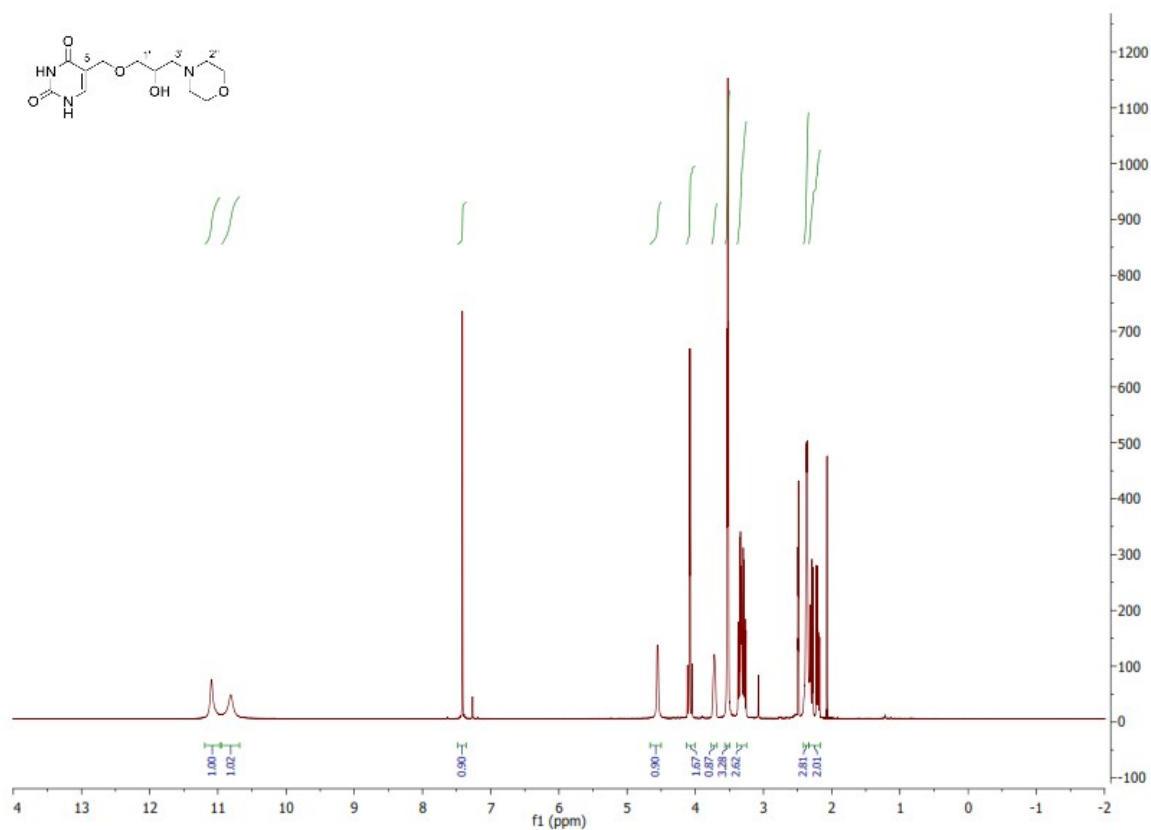
5-(((2-Oxido-1,3,2-dioxathiolan-4-yl)methoxy)methyl)pyrimidin-2,4(1H,3H)-dione (4)



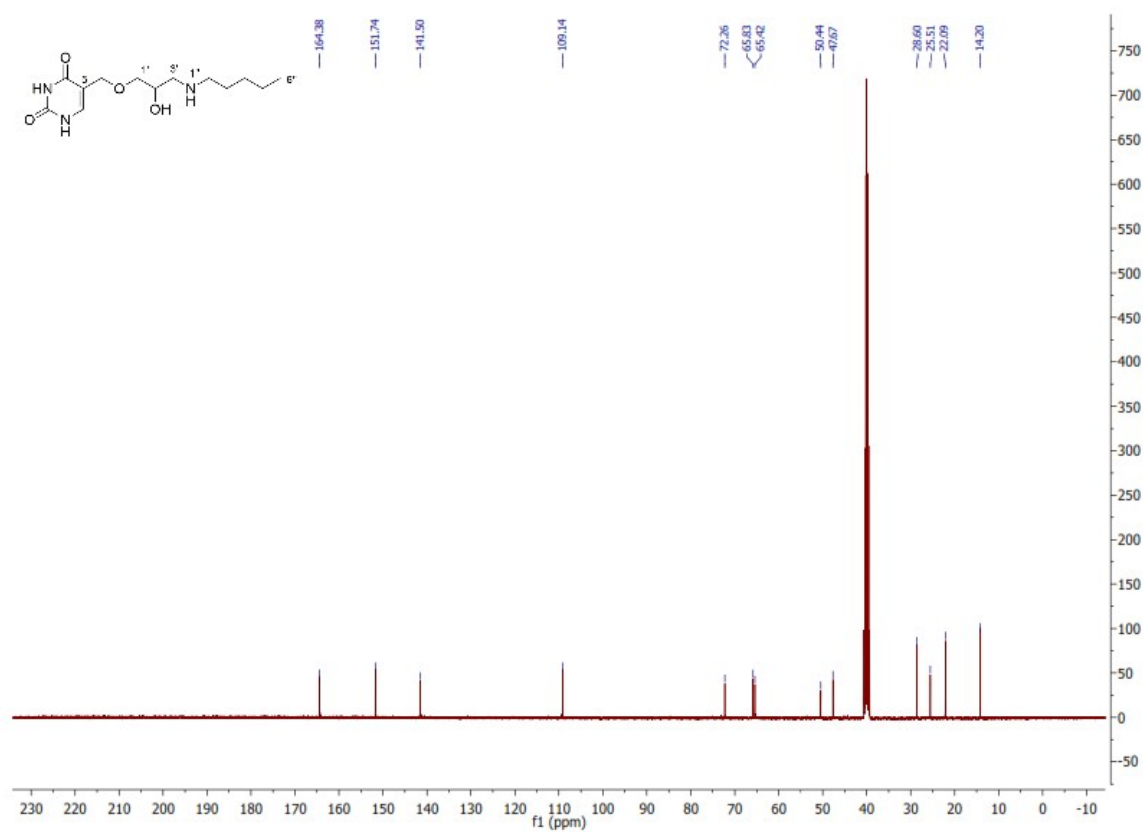
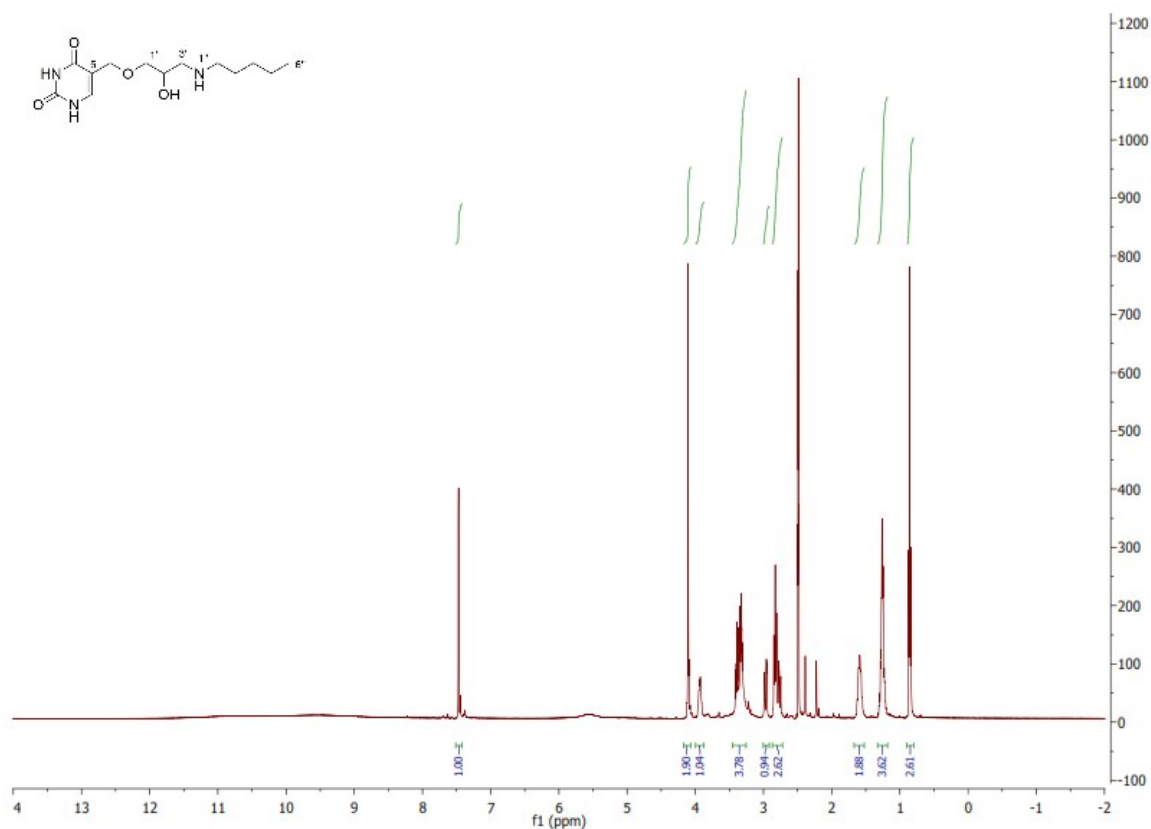
5-((2-Hydroxy-3-(piperidin-1-yl)propoxy)methyl)pyrimidin-2,4(1H,3H)-dione (5a)



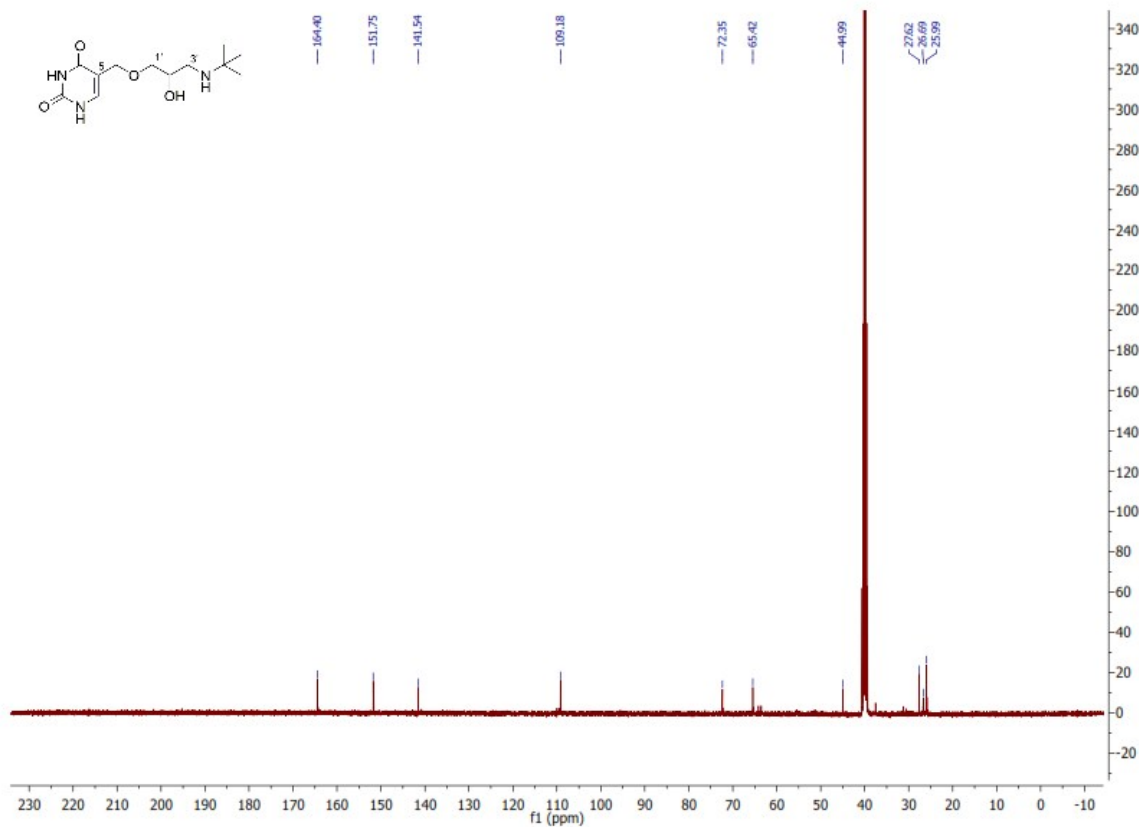
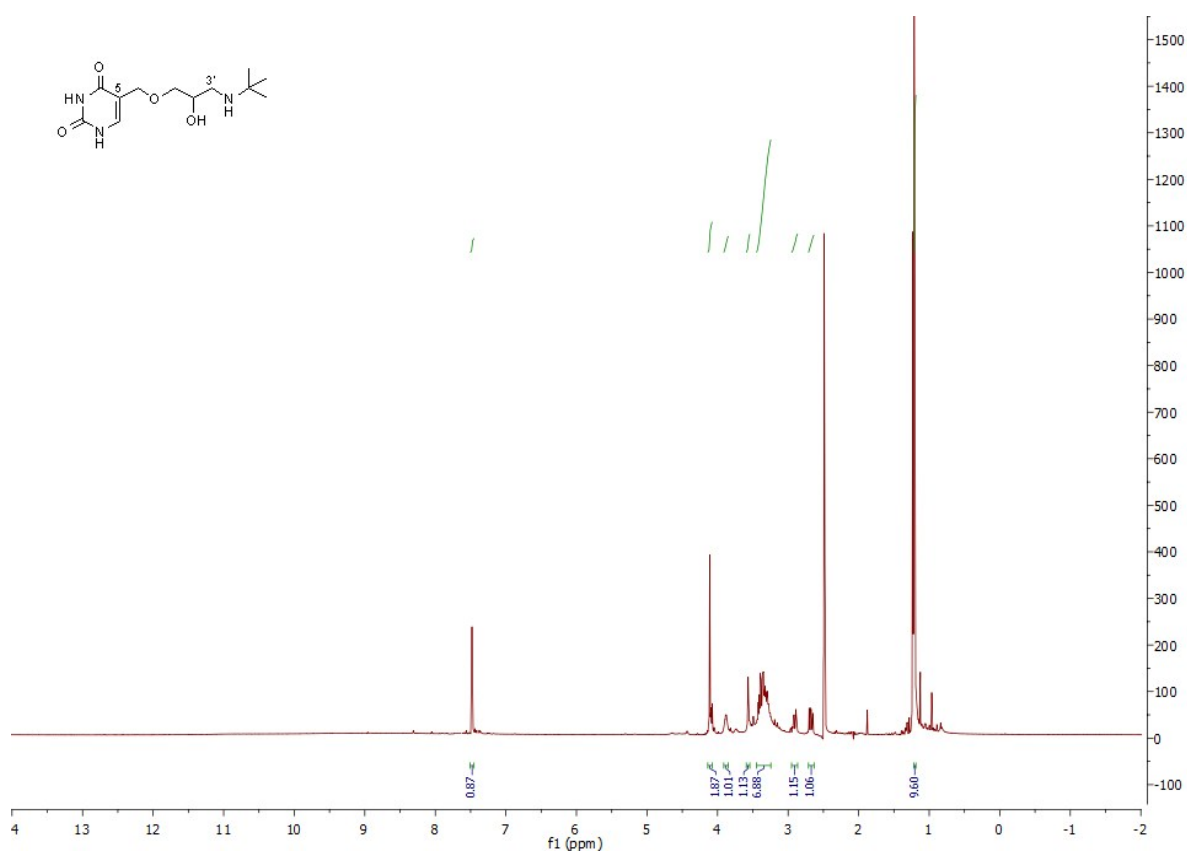
5-((2-Hydroxy-3-morpholinopropoxy)methyl)pyrimidin-2,4(1*H*,3*H*)-dione (5b)



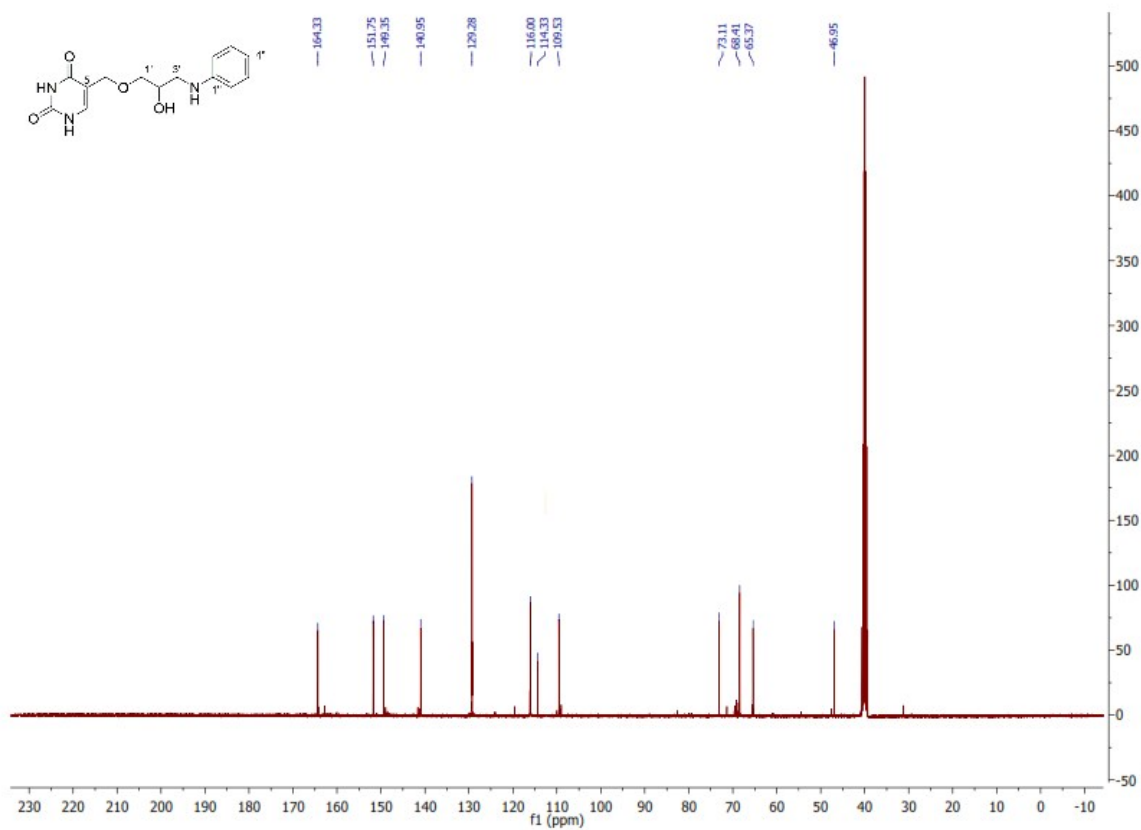
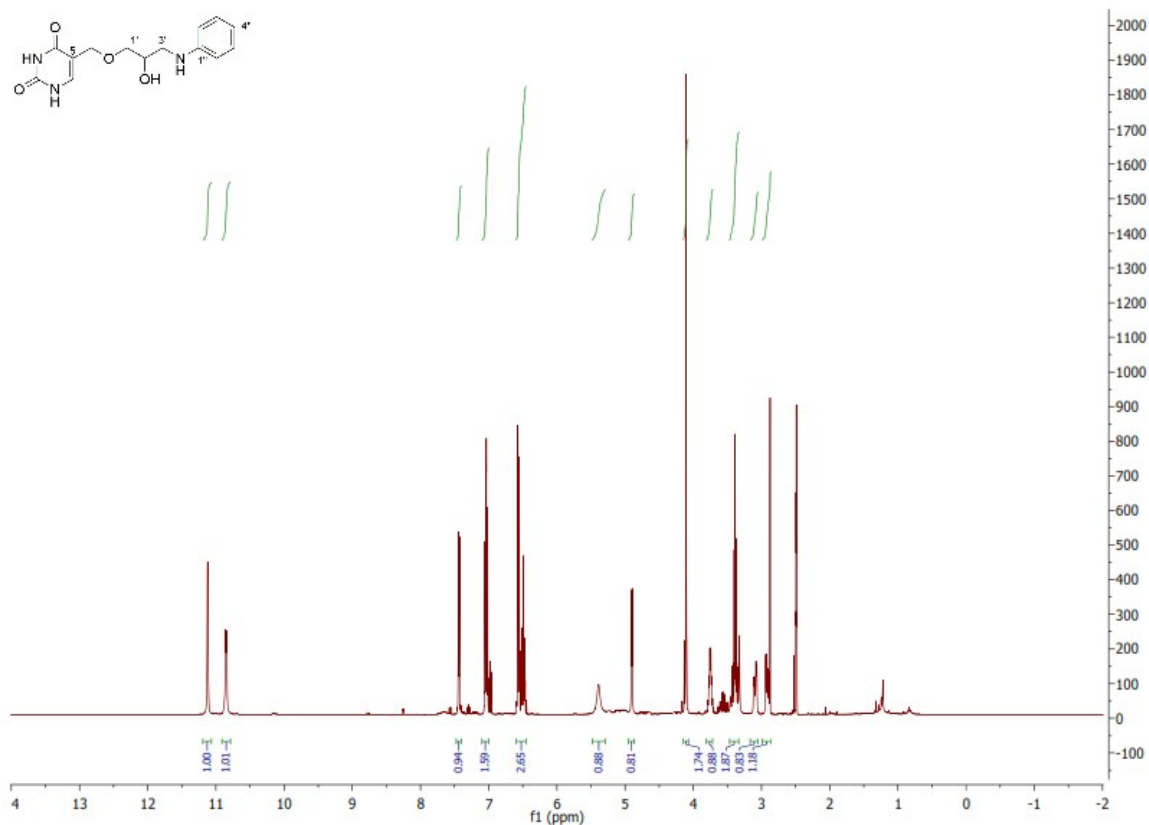
5-((2-Hydroxy-3-(pentylamino)propoxy)methyl)pyrimidin-2,4(1*H*,3*H*)-dione (5c)



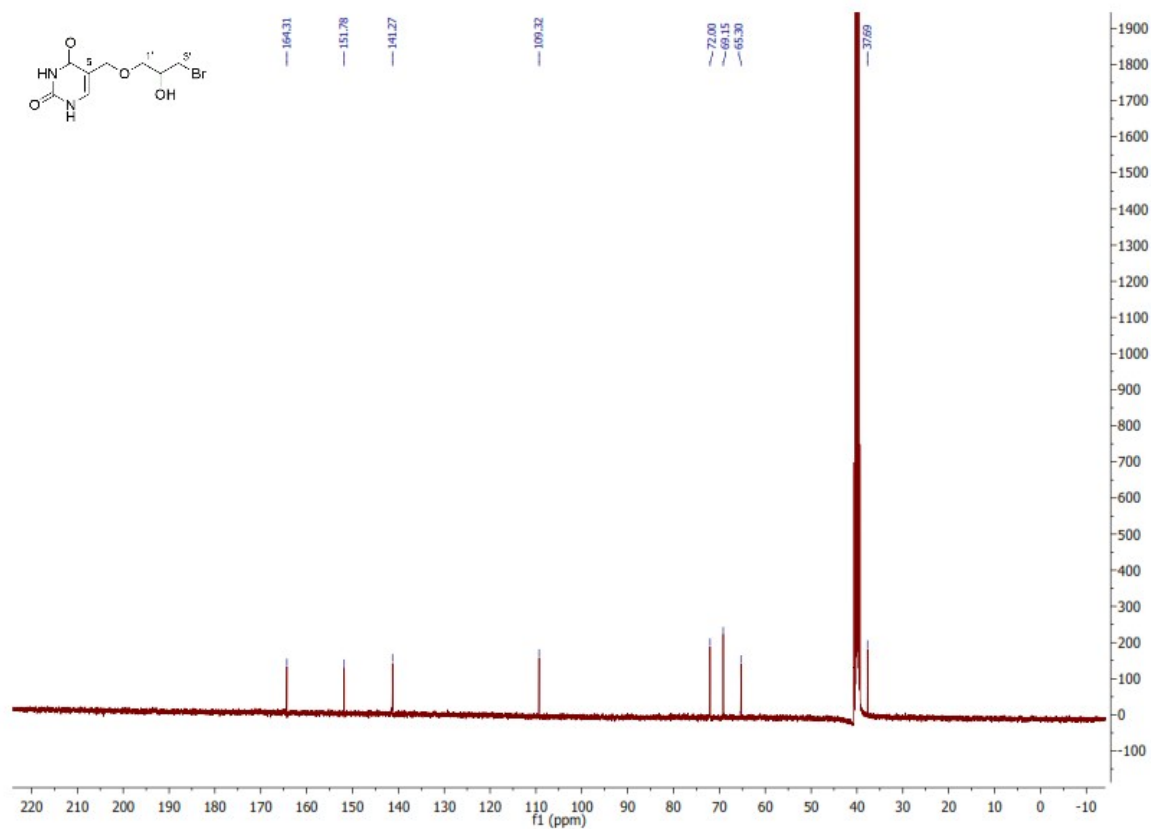
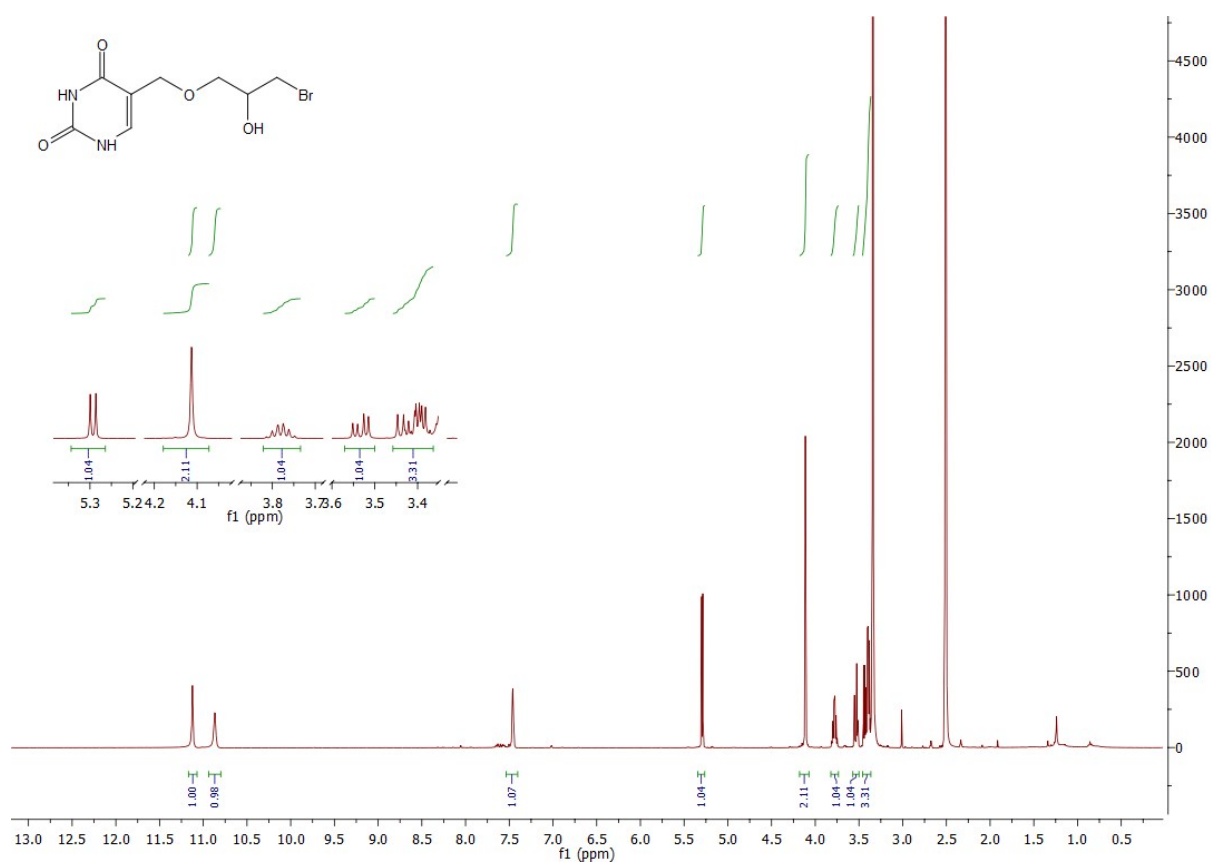
5-((3-(*tert*-Butylamino)-2-hydroxypropoxy)methyl)pyrimidin-2,4(1*H*,3*H*)-dione (5d)



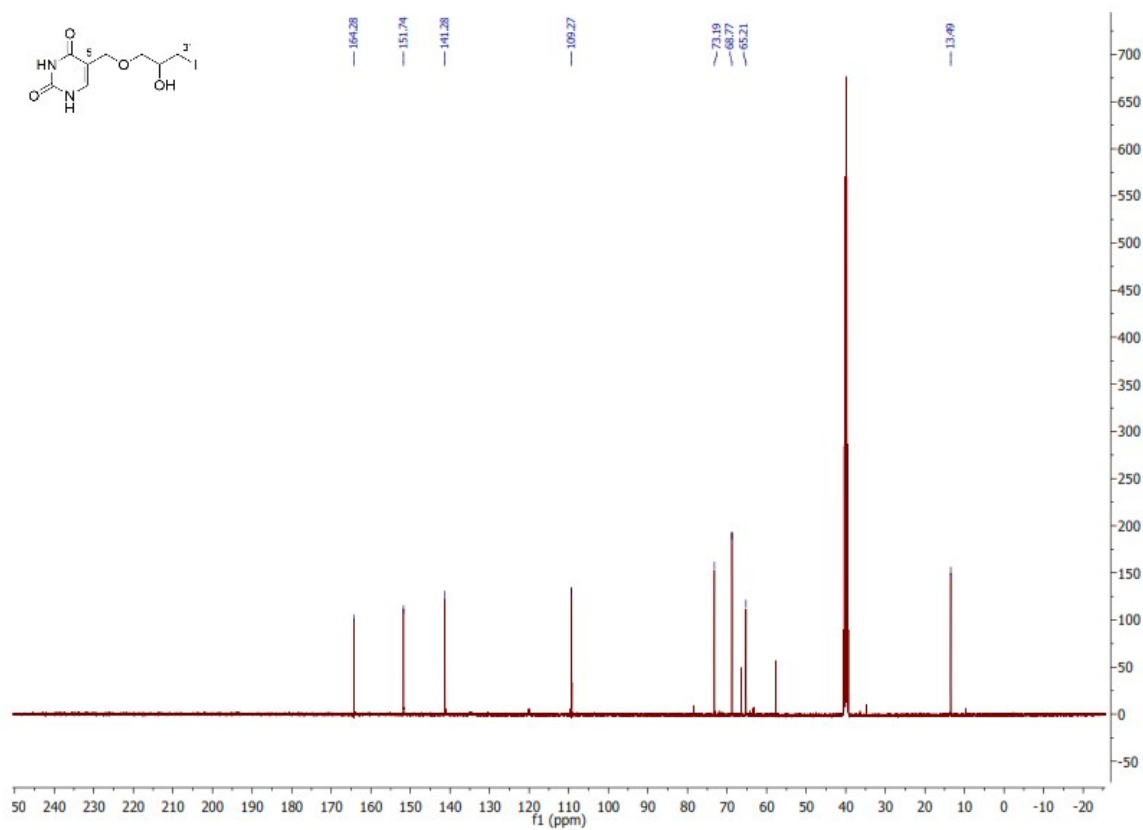
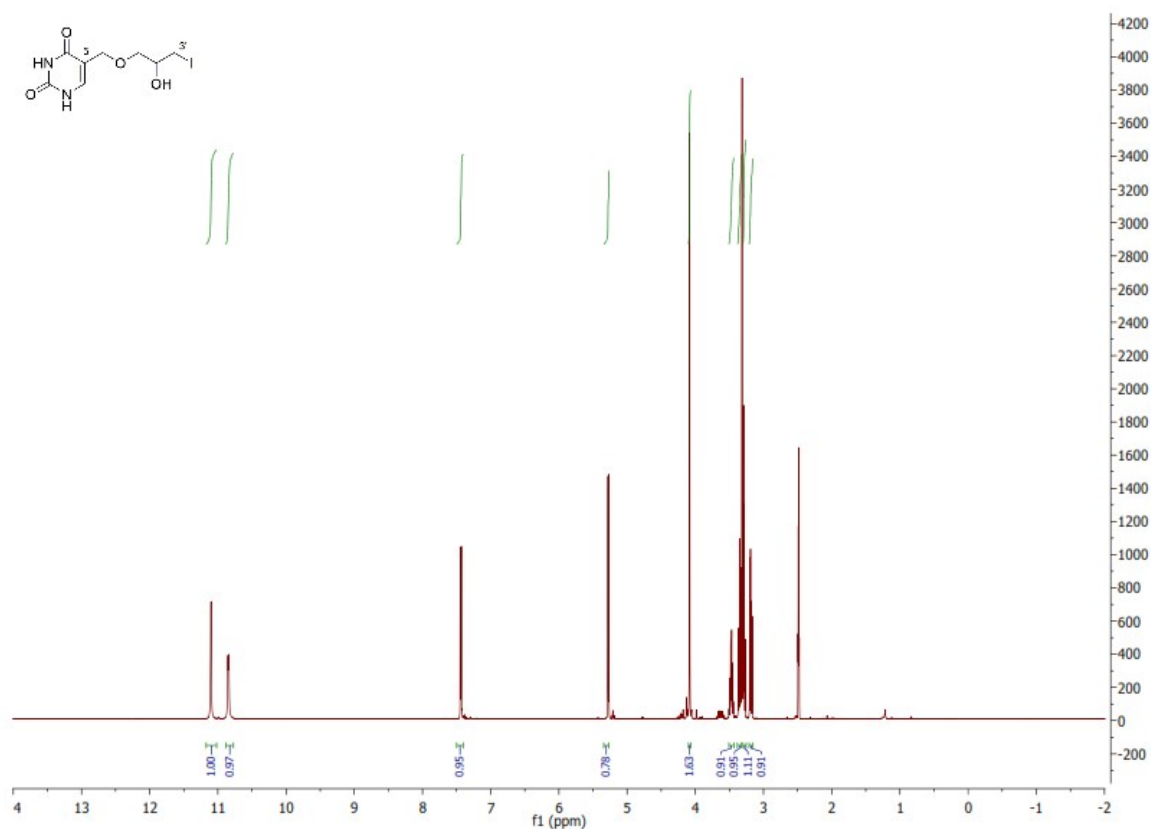
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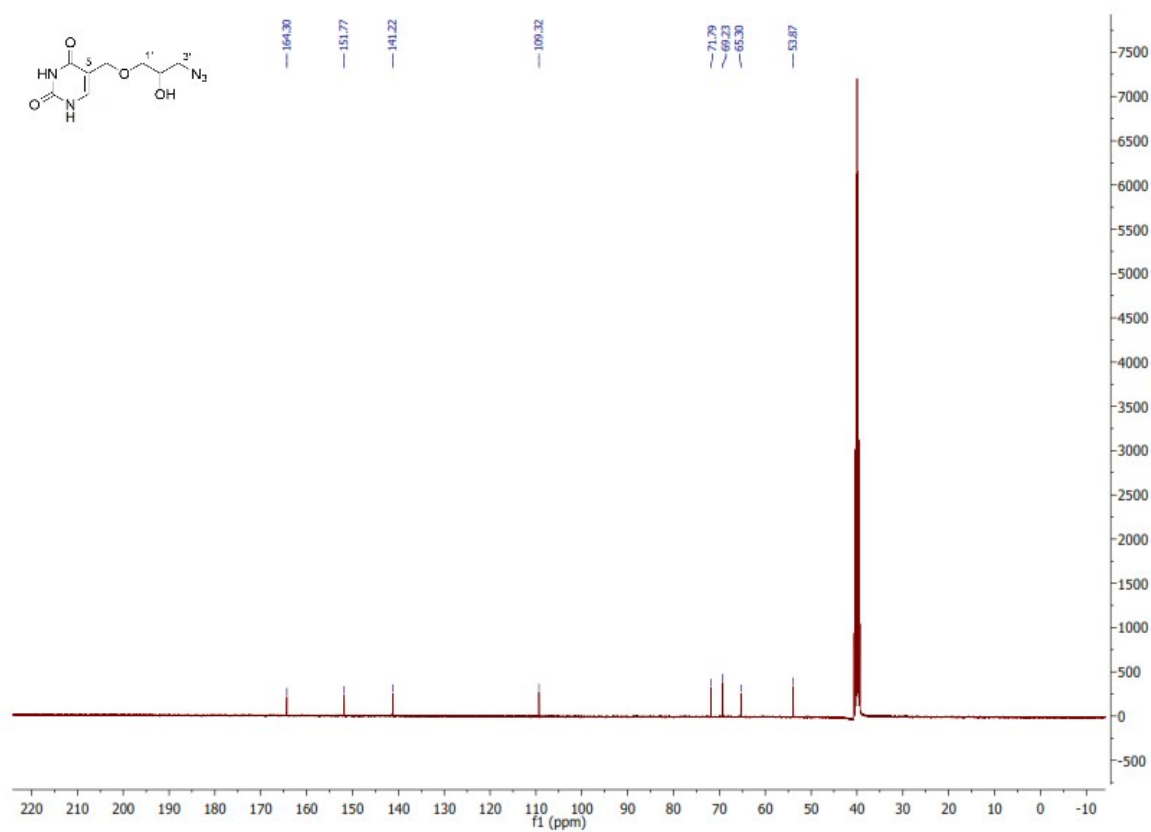
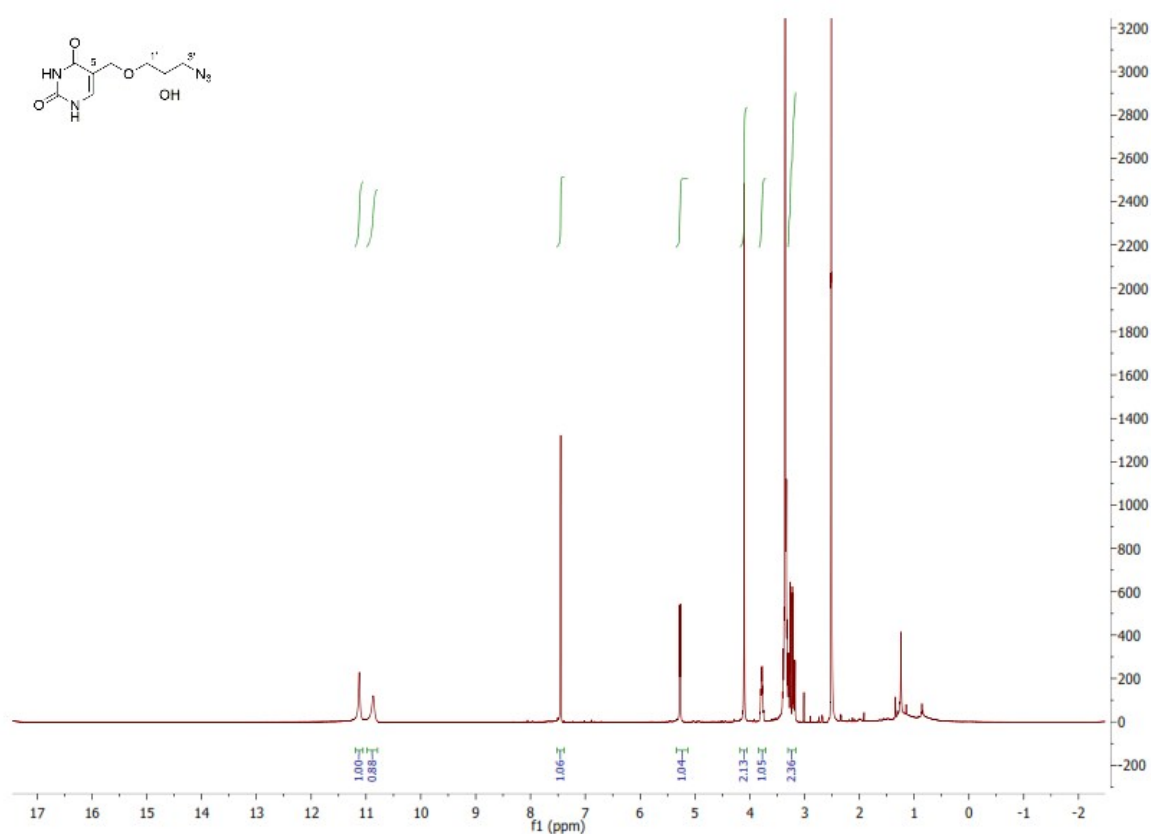
5-((3-Bromo-2-hydroxypropoxy)methyl)pyrimidine-2,4(1*H*,3*H*)-dione (5f)



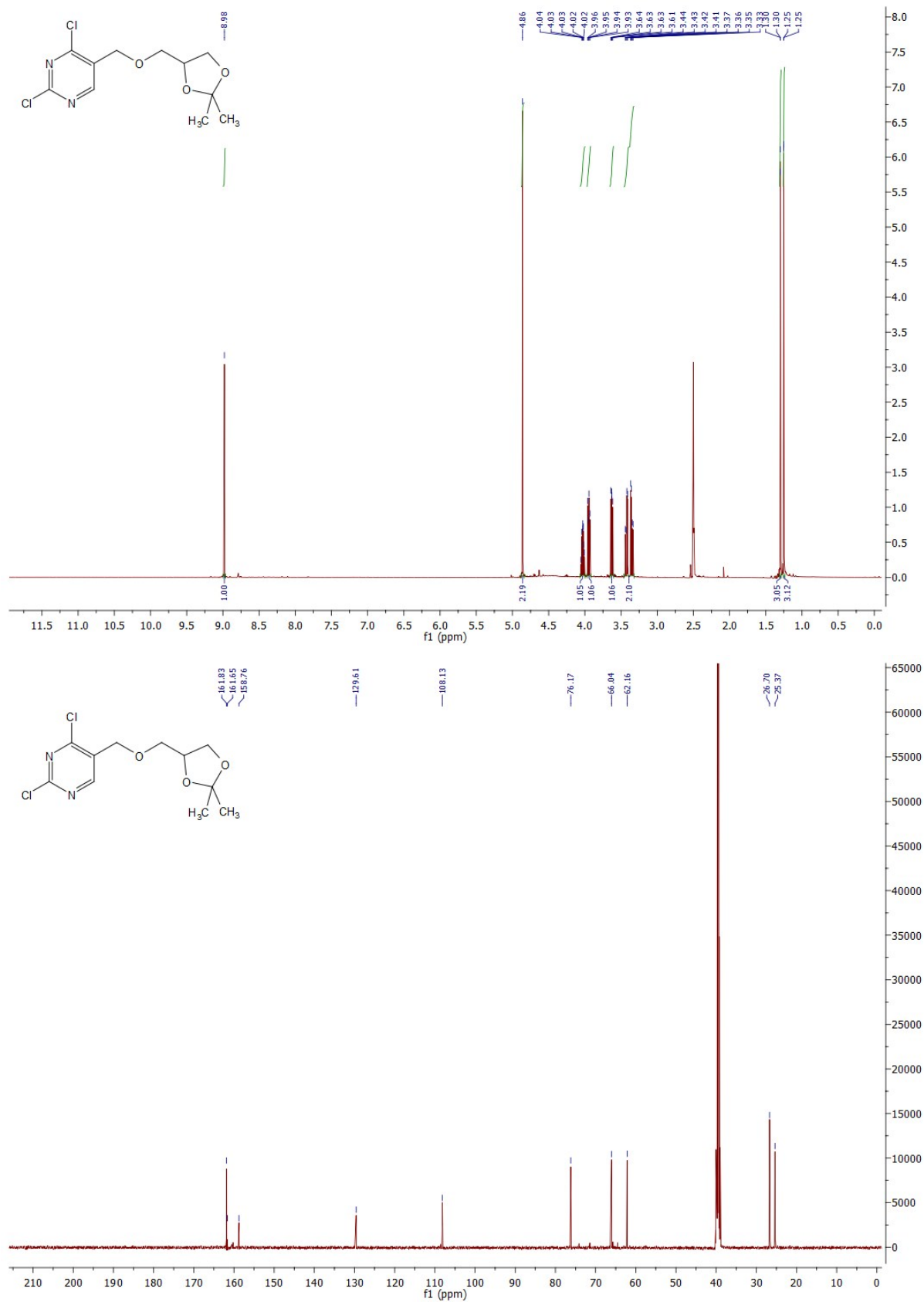
5-((2-Hydroxy-3-iodopropoxy)methyl)pyrimidin-2,4(1*H*,3*H*)-dione (5g)



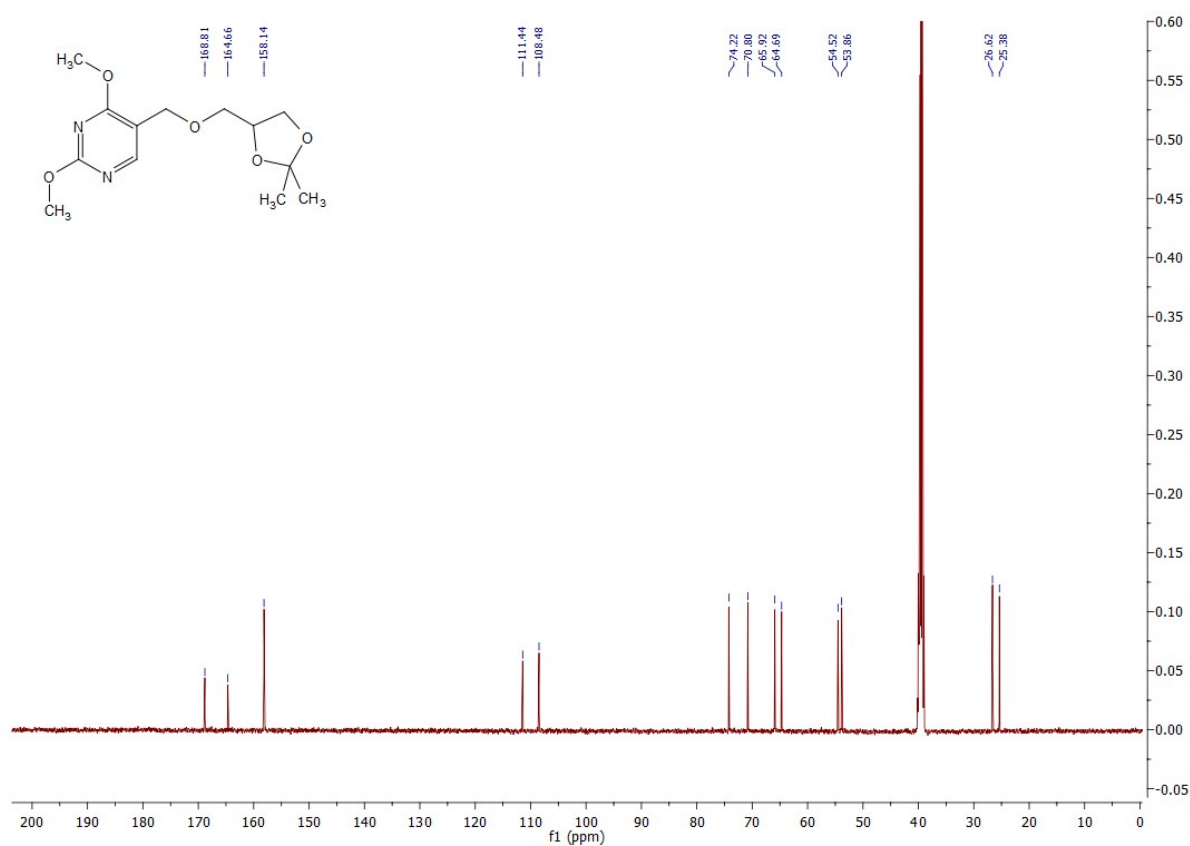
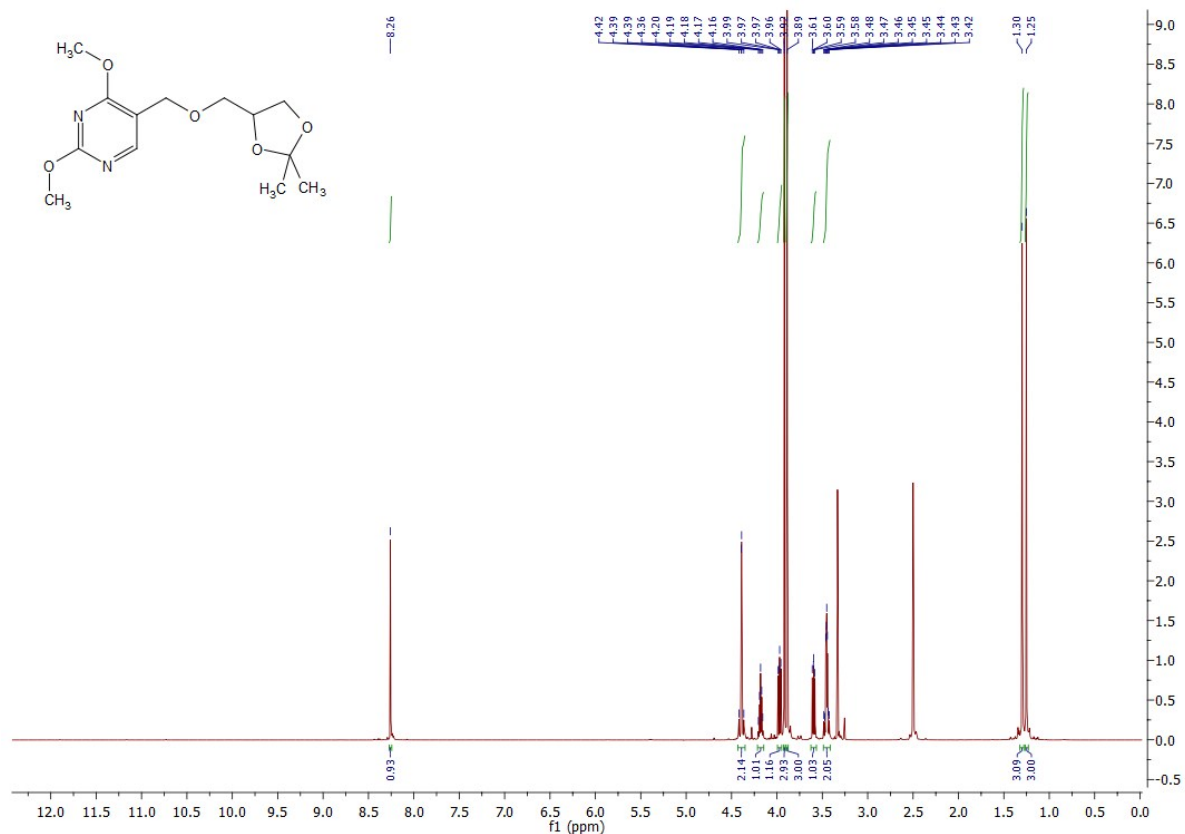
5-((3-Azido-2-hydroxypropoxy)methyl)pyrimidine-2,4(1*H*,3*H*)-dione (5h)



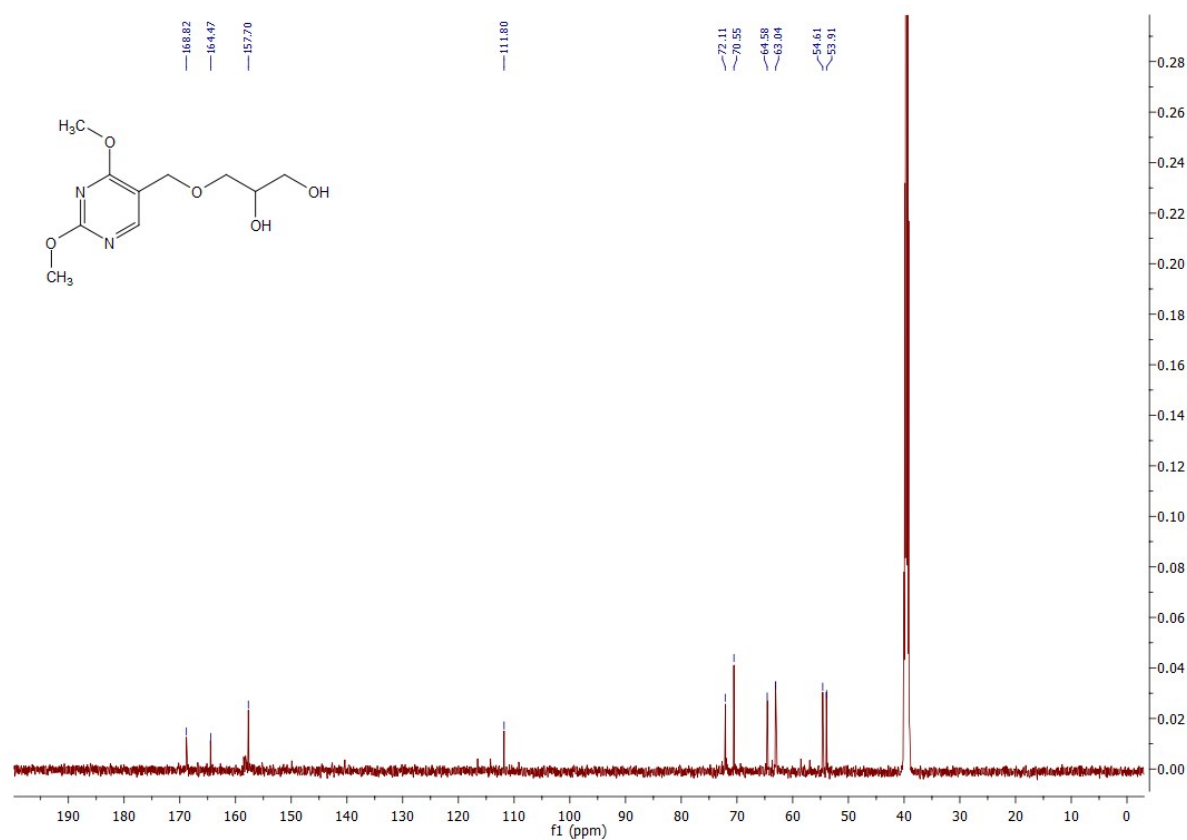
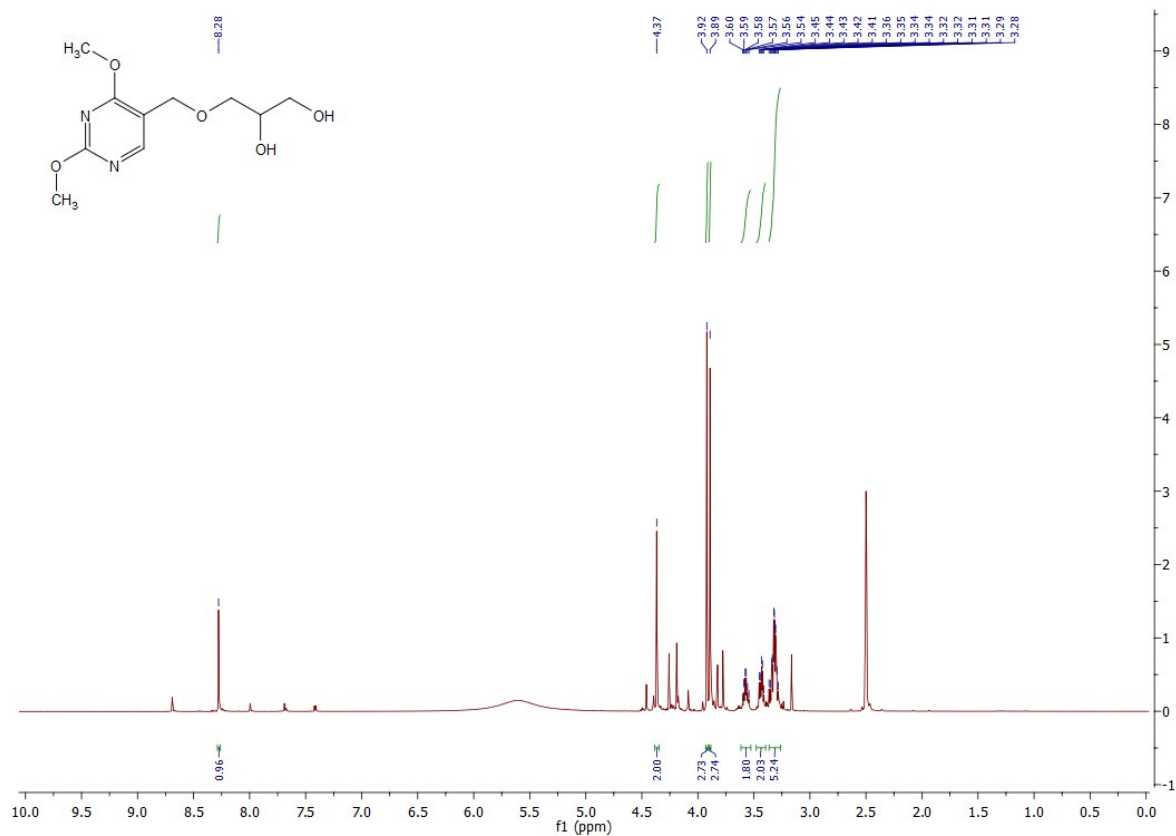
2,4-Dichloro-5-(((2,2-dimethyl-1,3-dioxolan-4-yl)methoxy)methyl)pyrimidine (7)



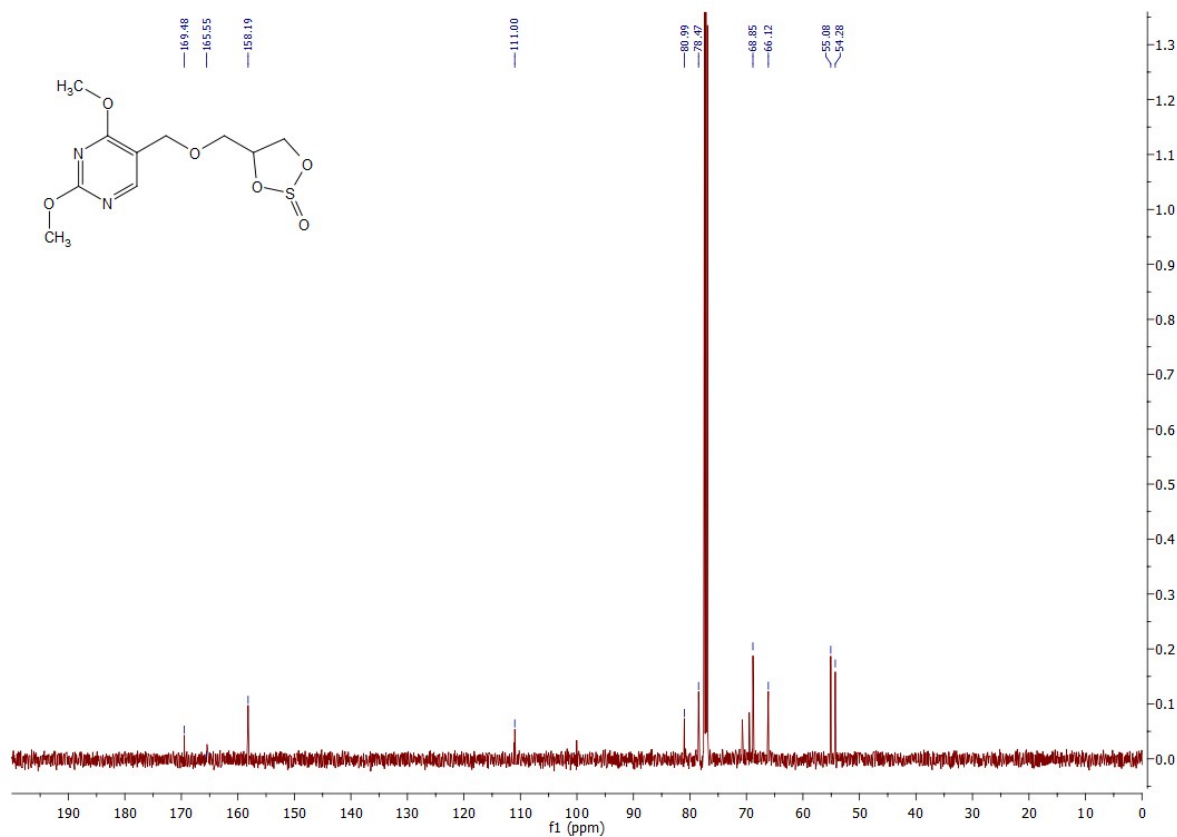
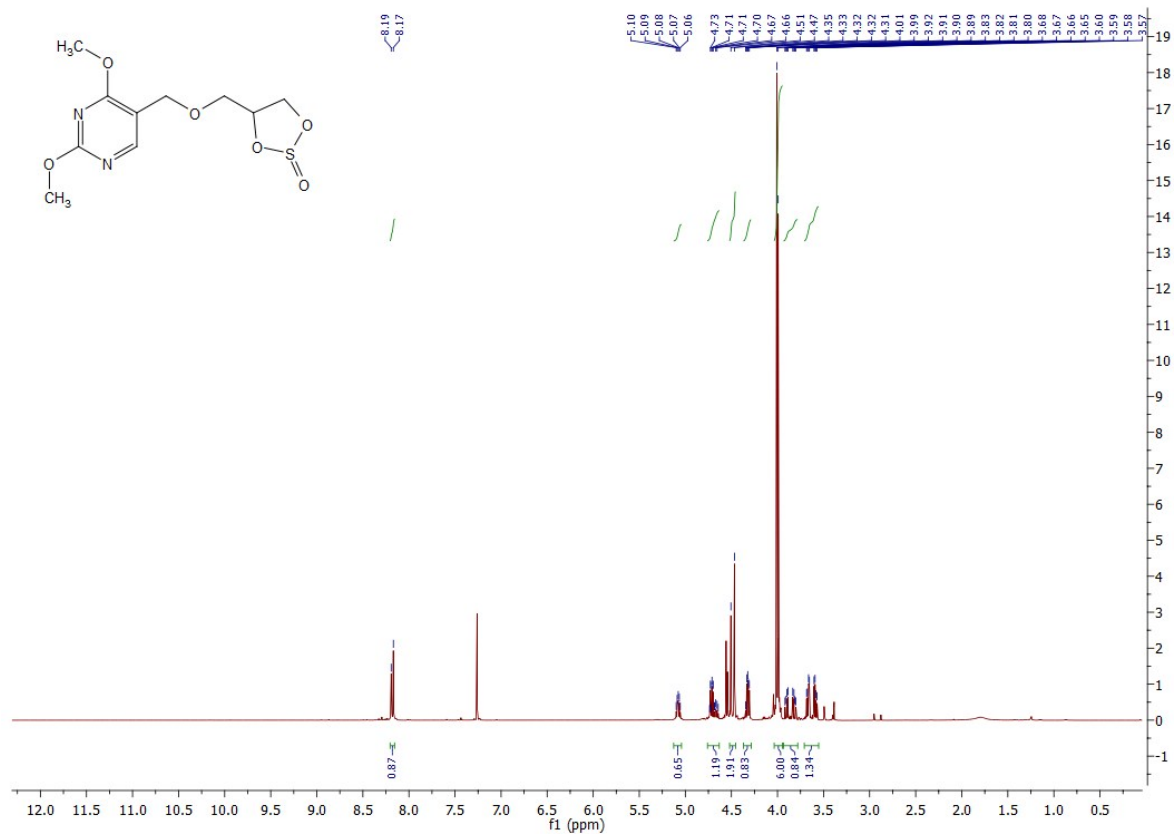
5-(((2,2-Dimethyl-1,3-dioxolan-4-yl)methoxy)methyl)-2,4-dimethoxypyrimidine (8)



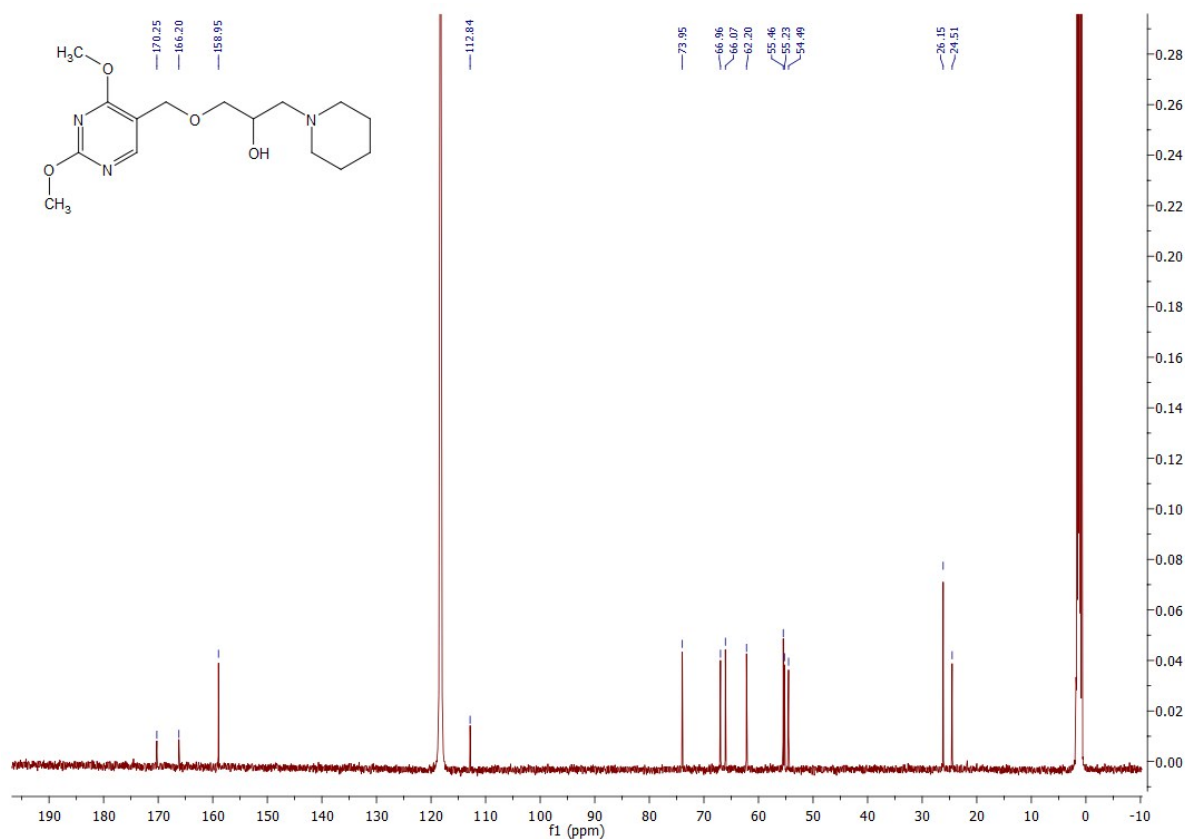
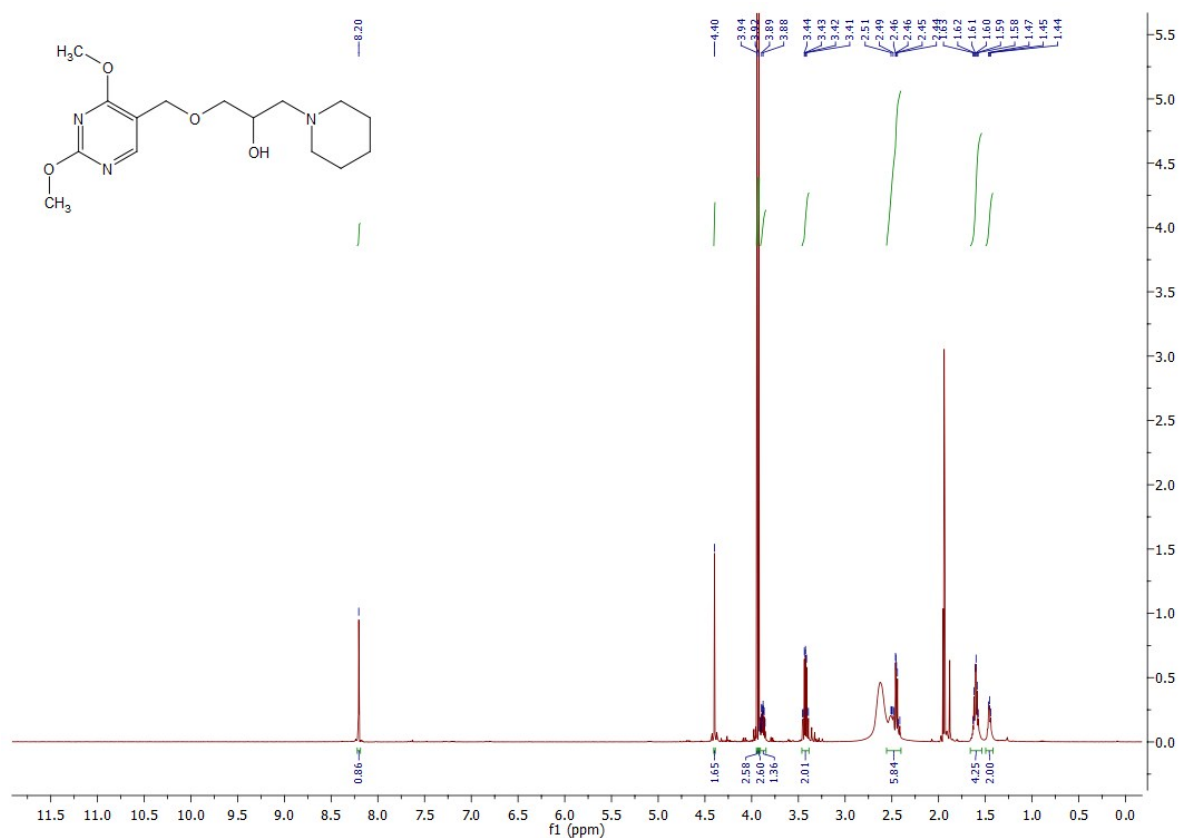
3-((2,4-Dimethoxypyrimidin-5-yl)methoxy)propane-1,2-diol (9)



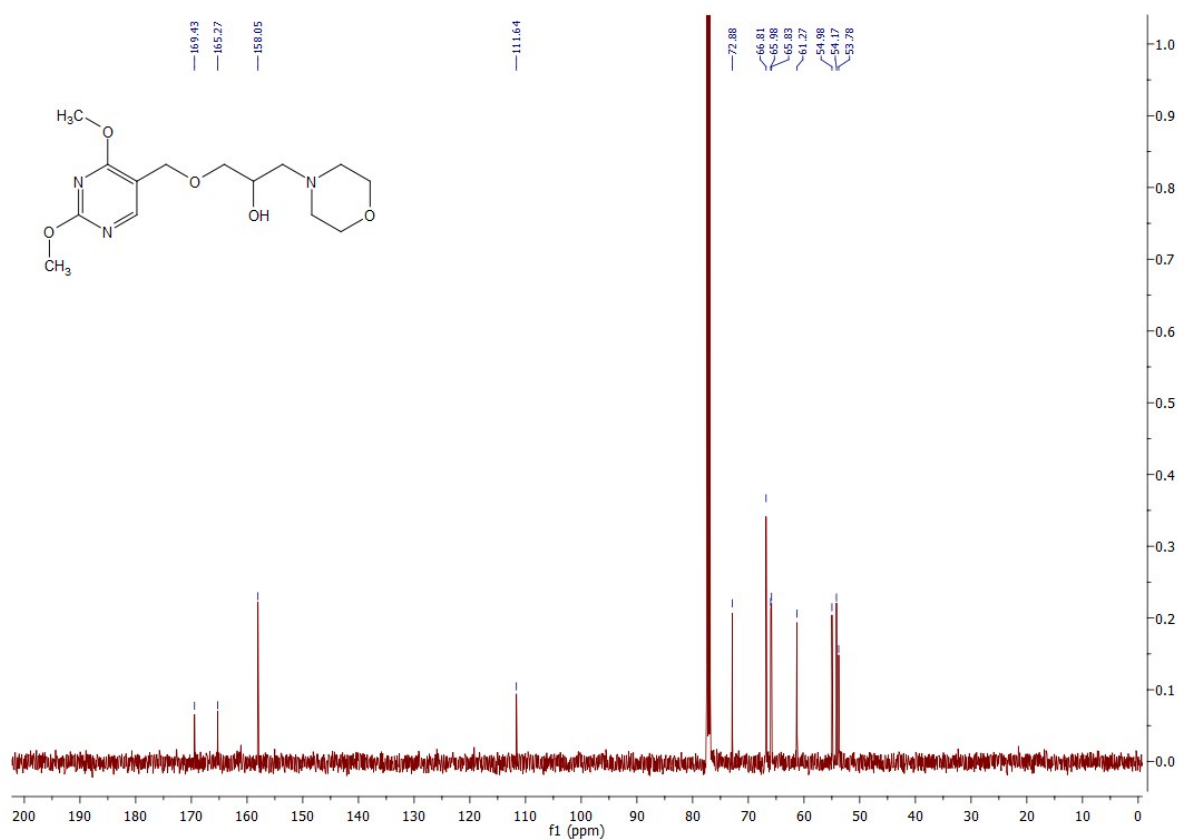
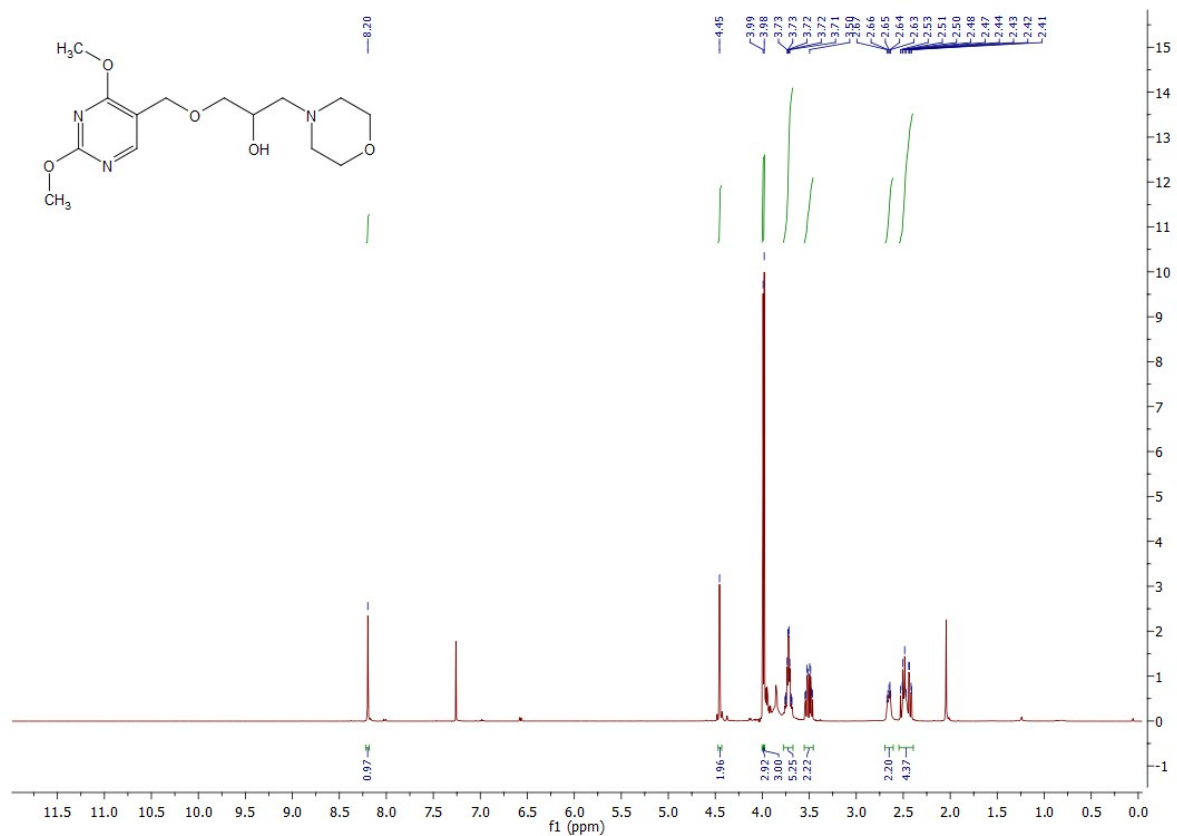
4-(((2,4-Dimethoxypyrimidin-5-yl)methoxy)methyl)-1,3,2-dioxathiolane 2-oxide (10)



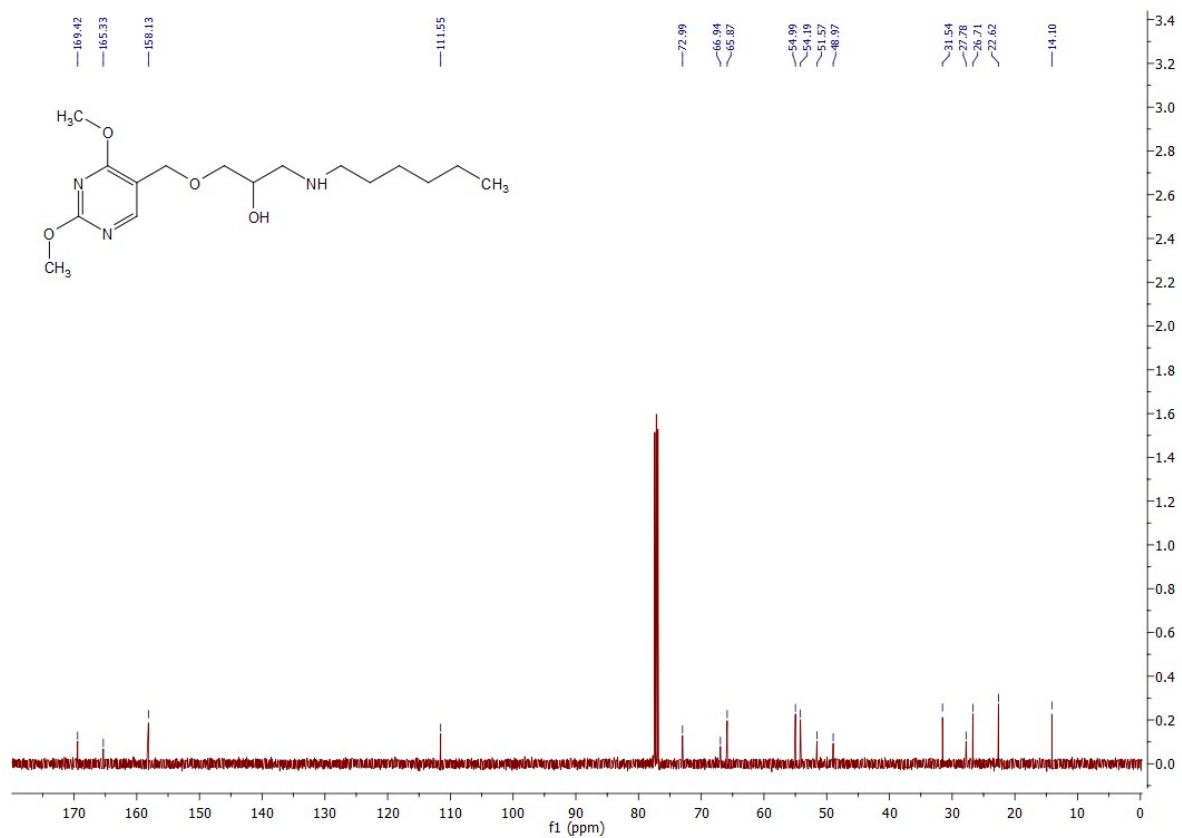
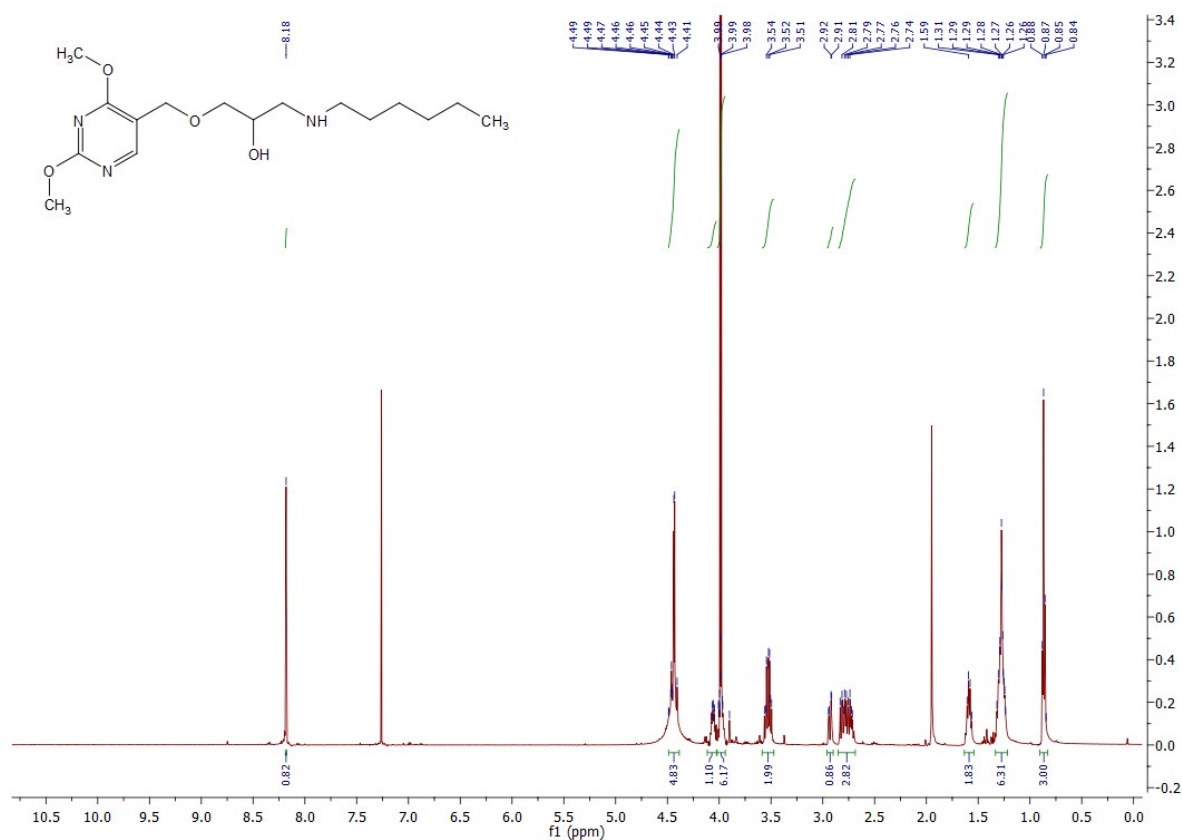
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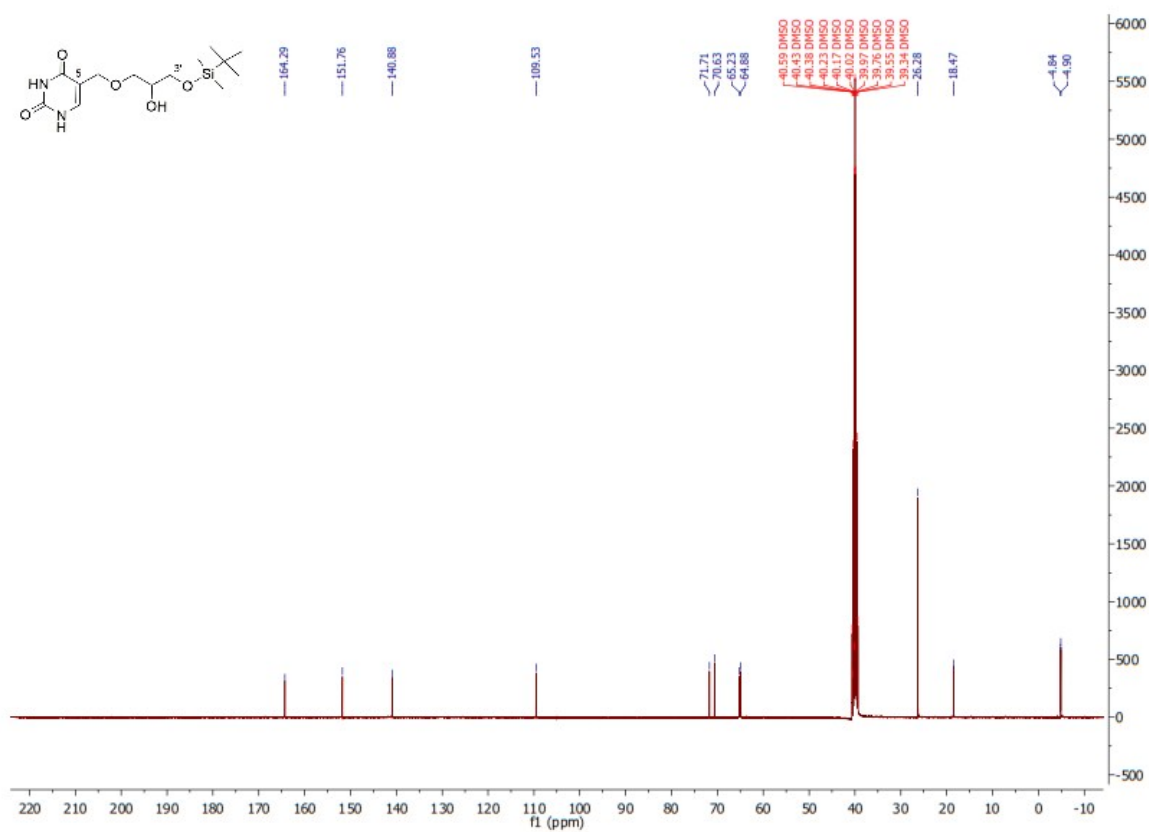
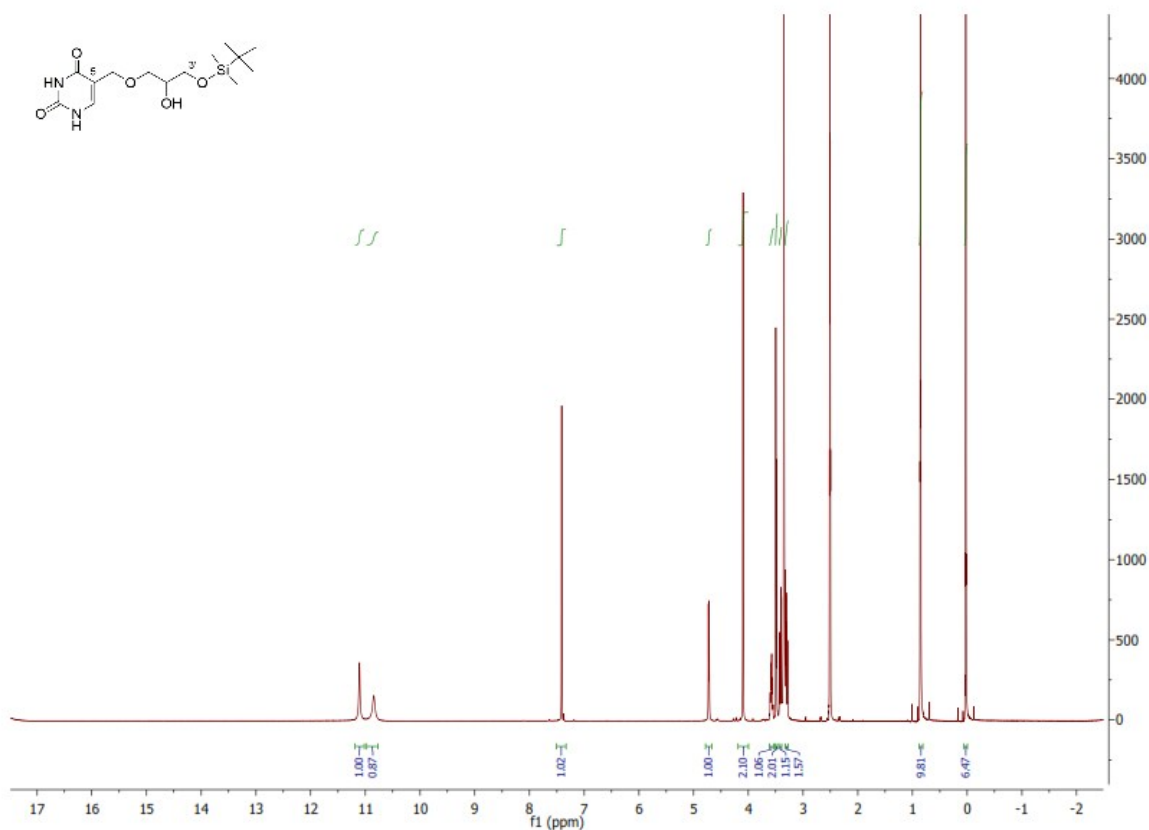
1-((2,4-Dimethoxypyrimidin-5-yl)methoxy)-3-morpholinopropan-2-ol (11b)



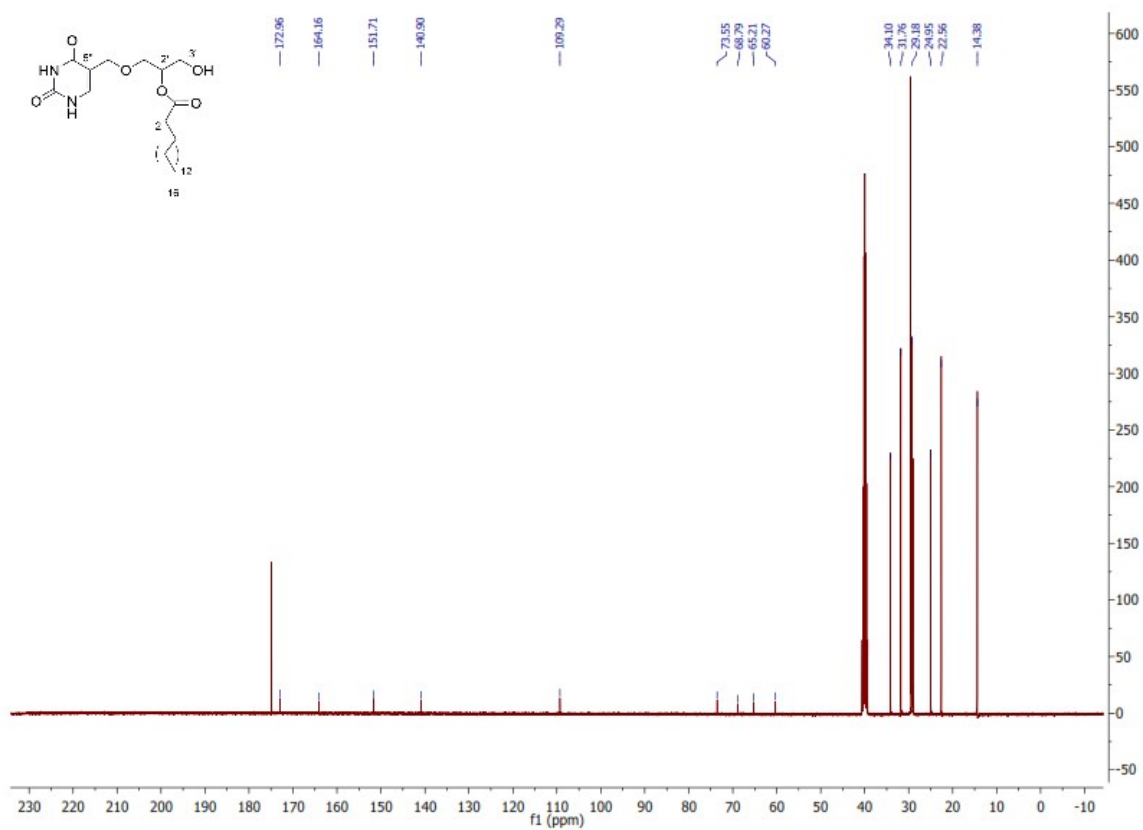
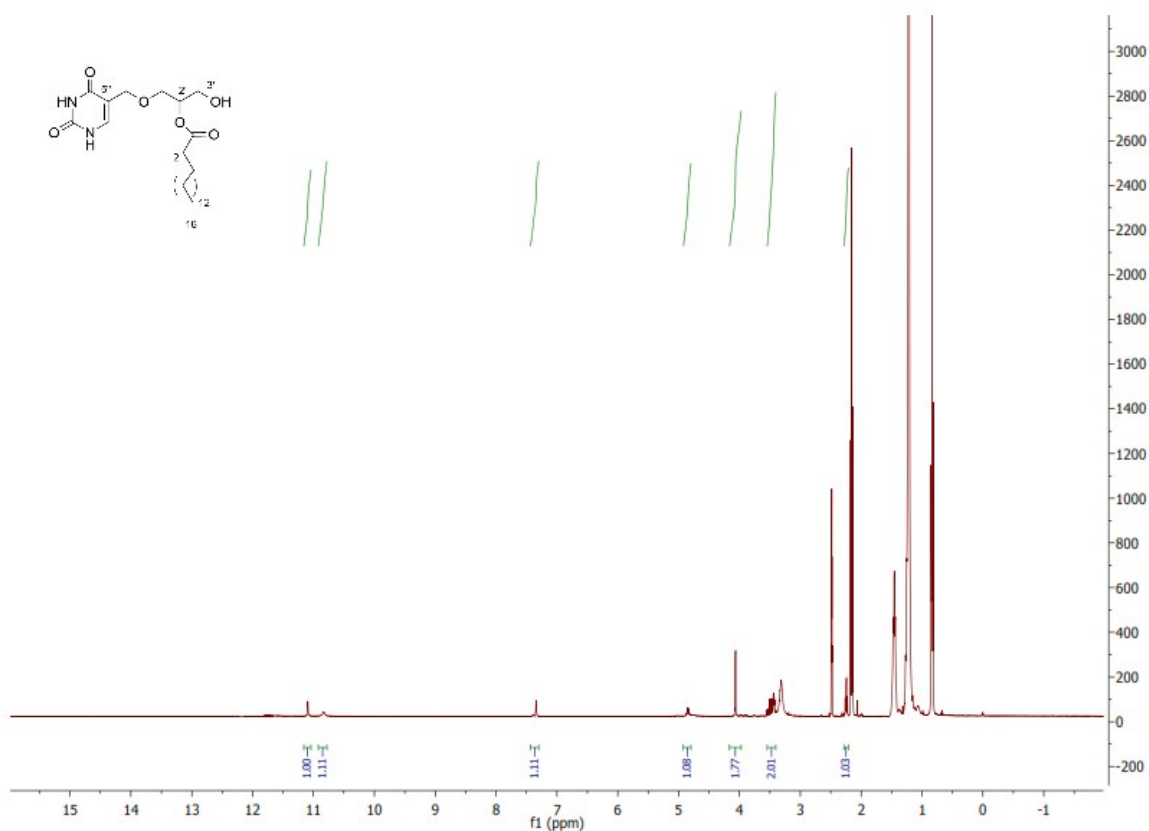
1-((2,4-dimethoxypyrimidin-5-yl)methoxy)-3-(hexylamino)propan-2-ol (11c)



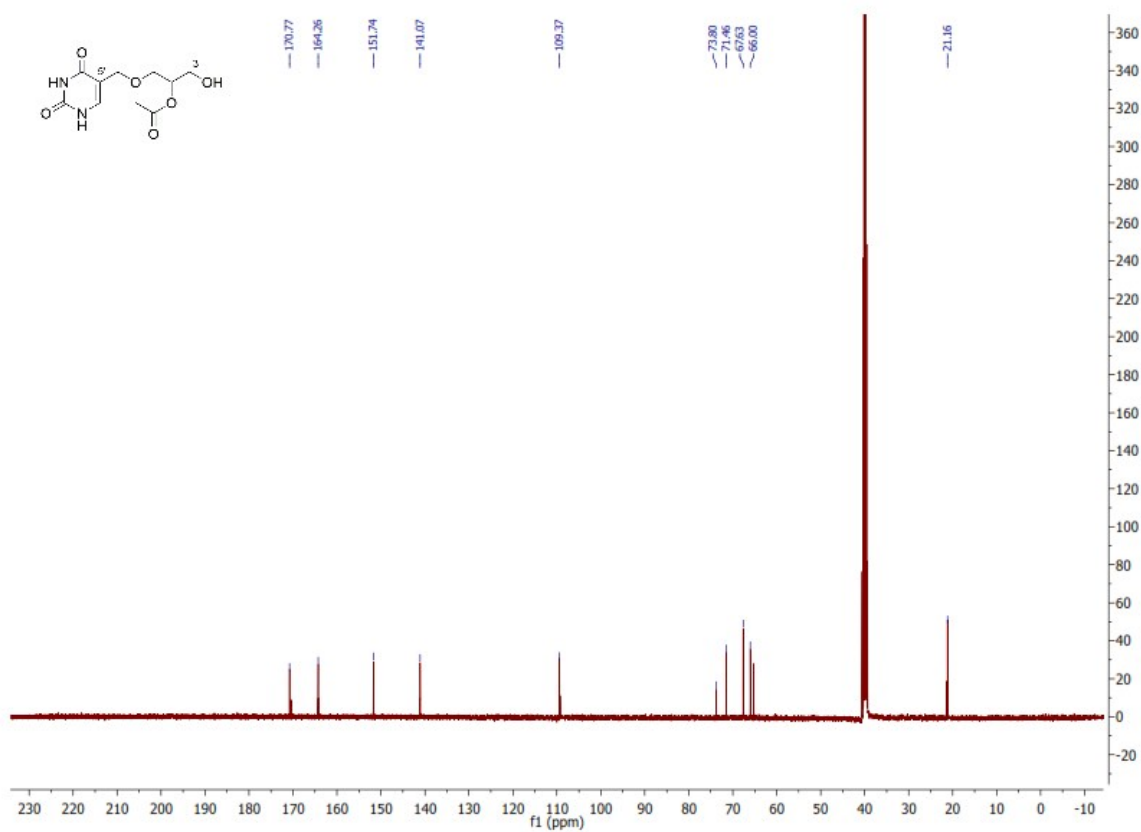
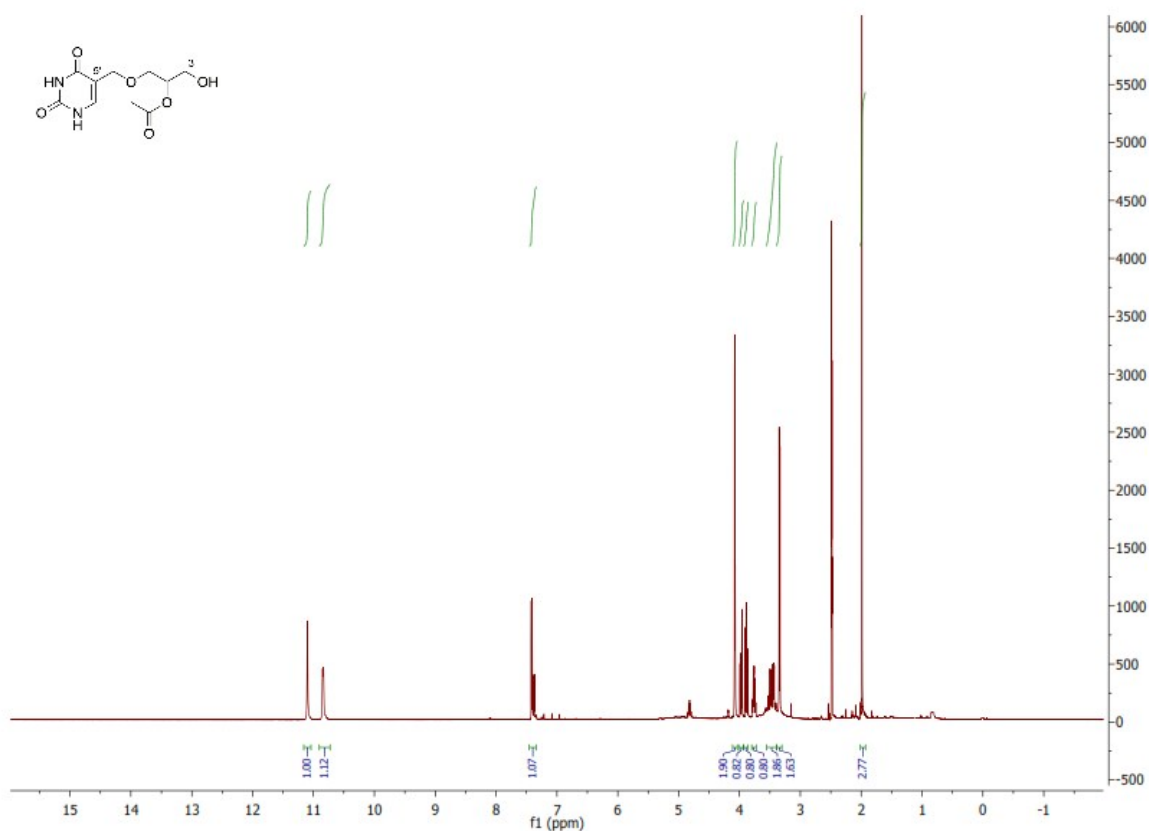
5-((3-((*tert*-Butyldimethylsilyl)oxy)-2-hydroxypropoxy)methyl)pyrimidin-2,4(1*H*,3*H*)-dione (12c)



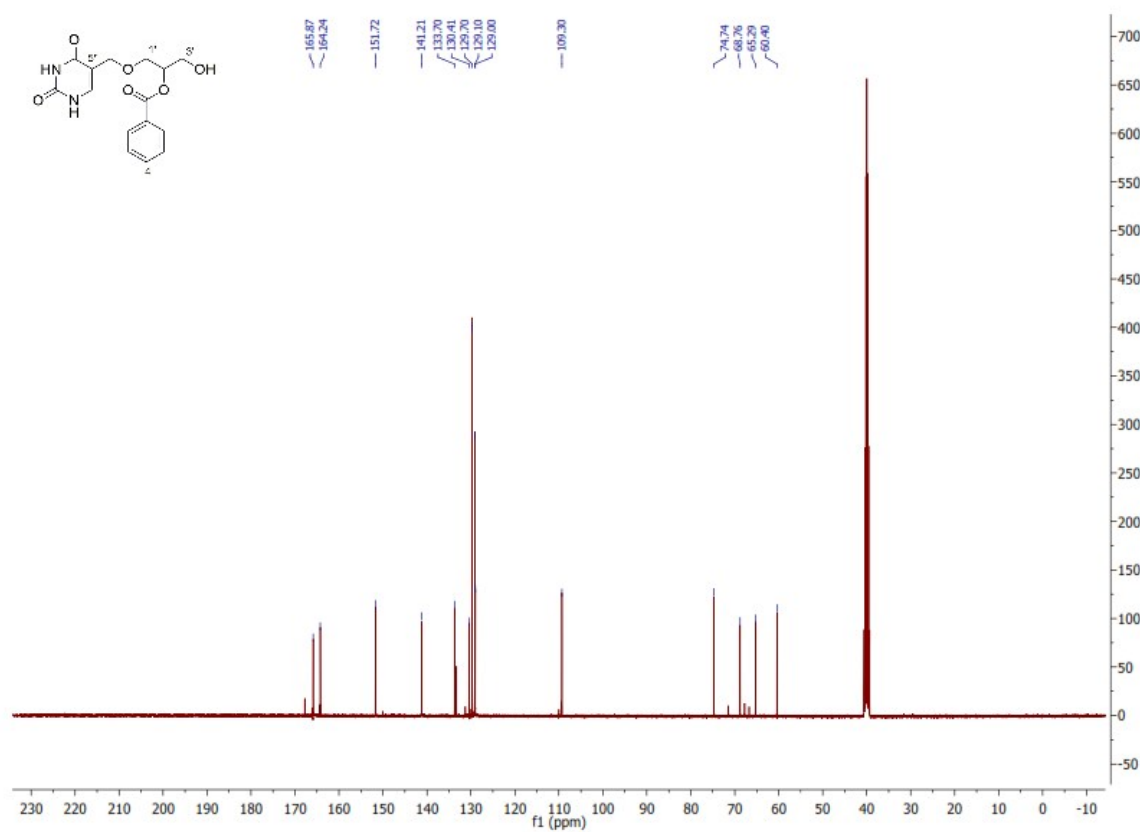
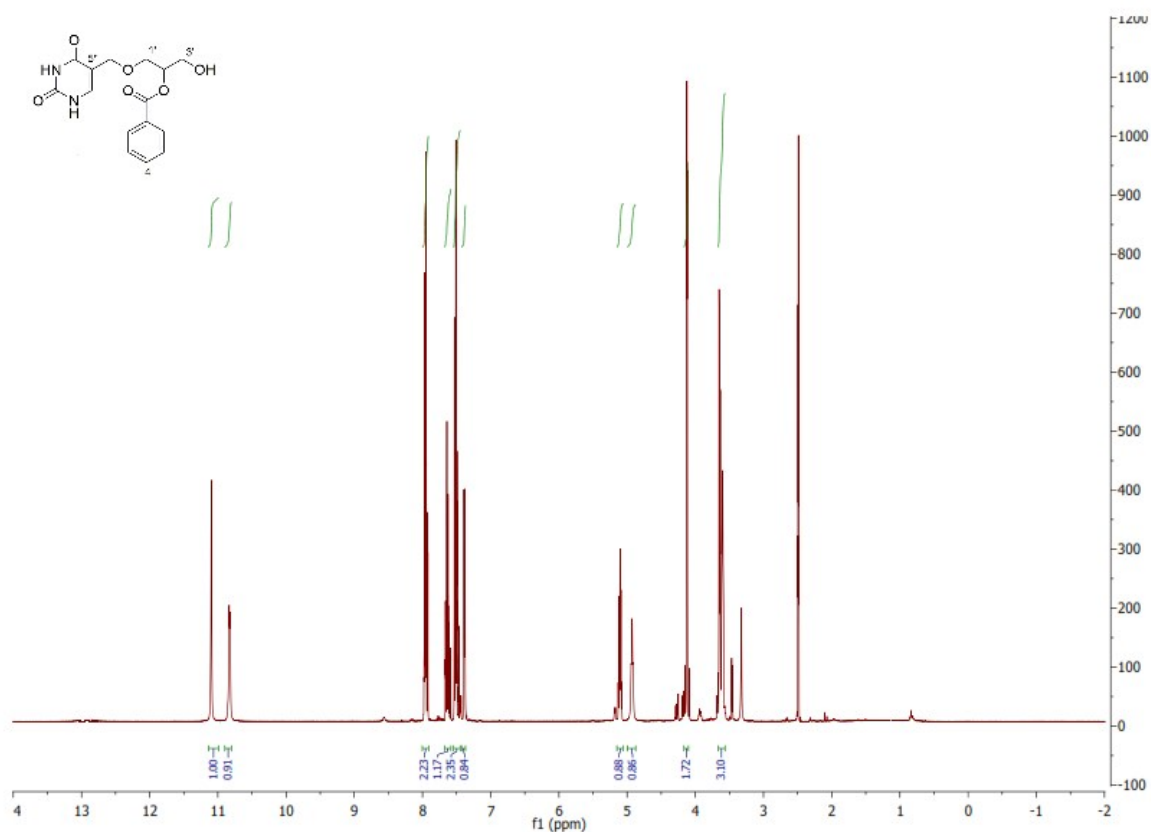
1-((2,4-Dioxo-1,2,3,4-tetrahydropyrimidin-5-yl)methoxy)-3-hydroxypropan-2-yl palmitate (12b)



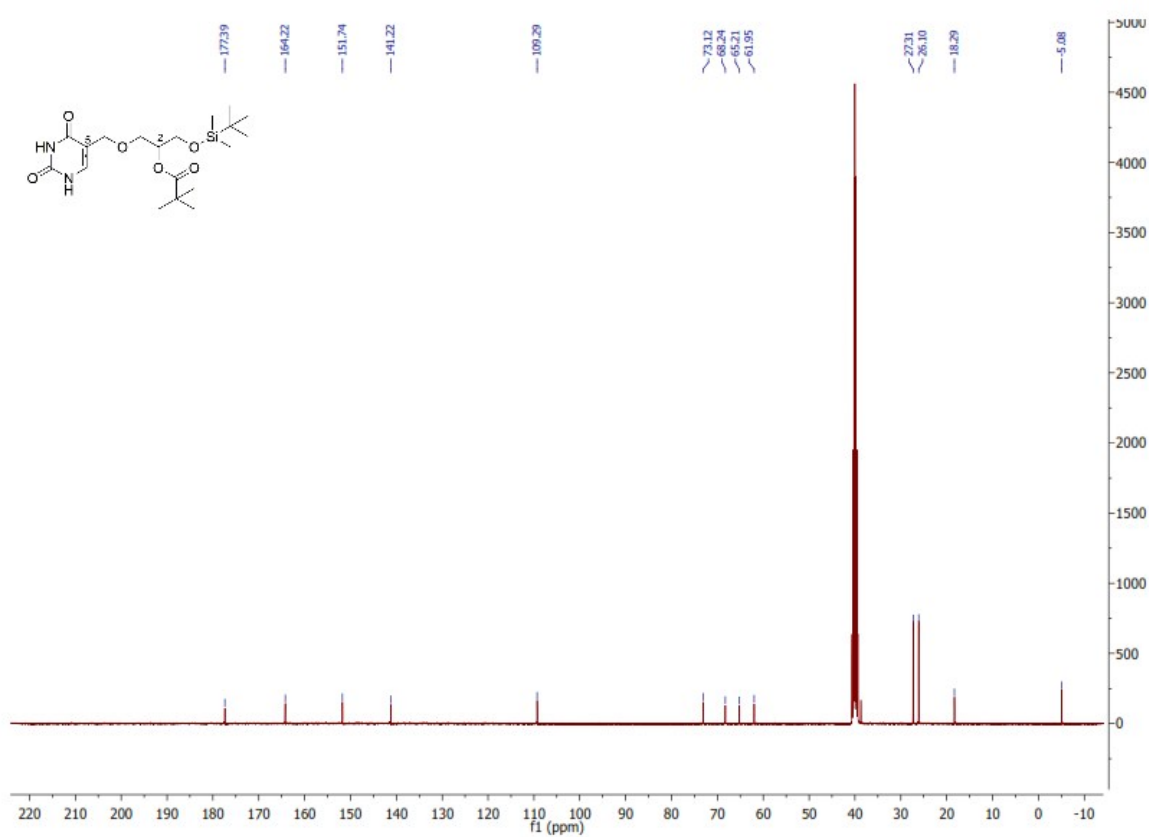
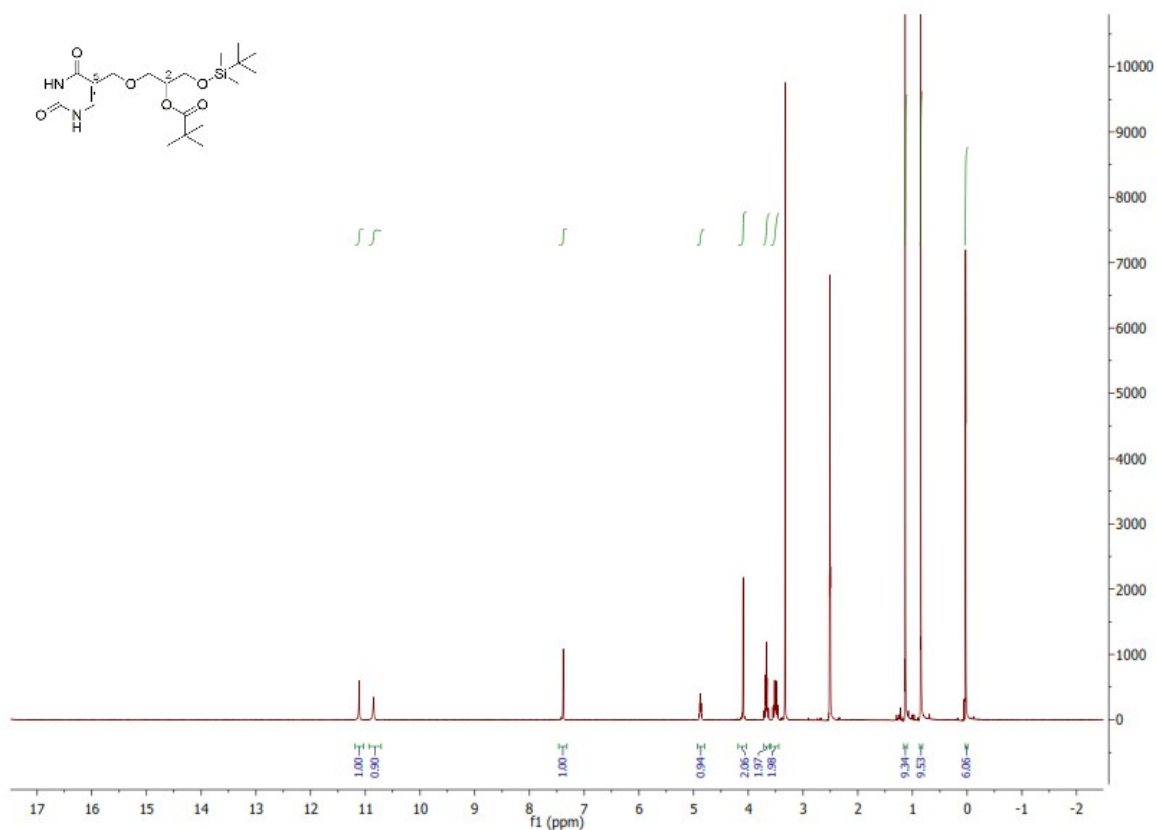
1-((2,4-Dioxo-1,2,3,4-tetrahydropyrimidin-5-yl)methoxy)-3-hydroxypropan-2-yl acetate (13d)



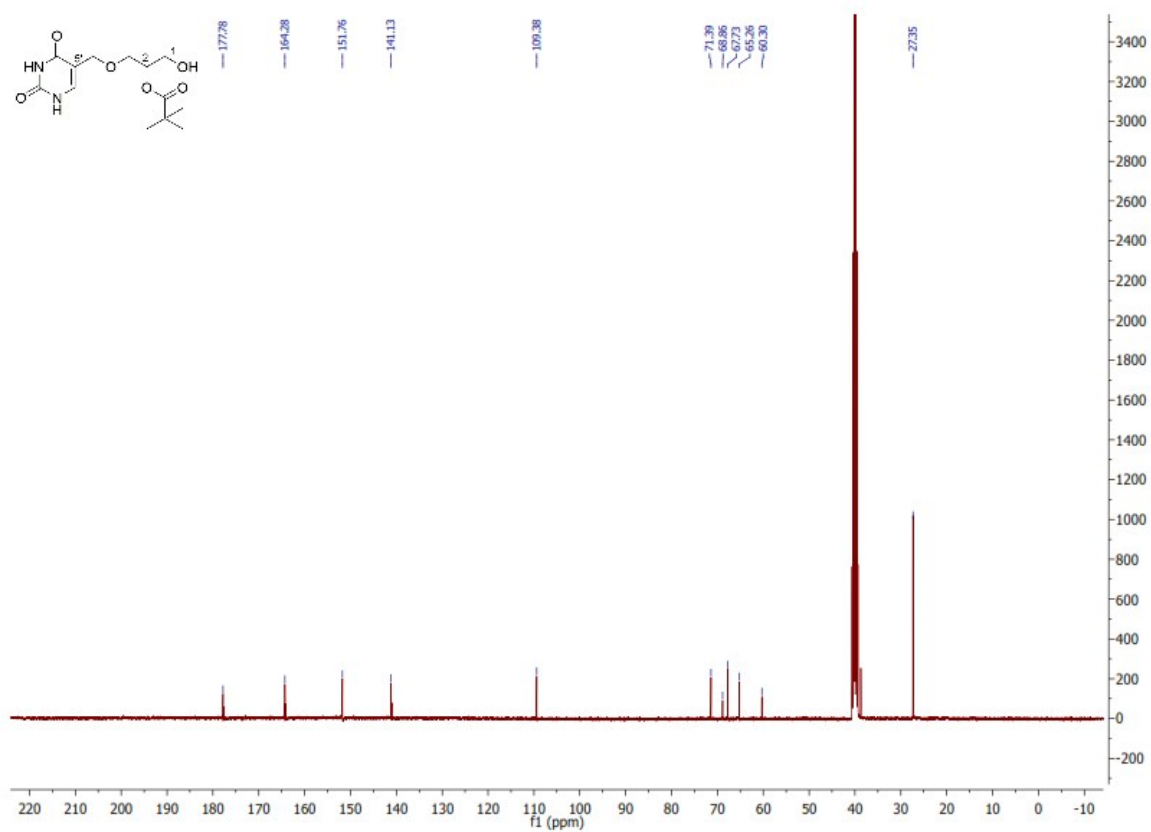
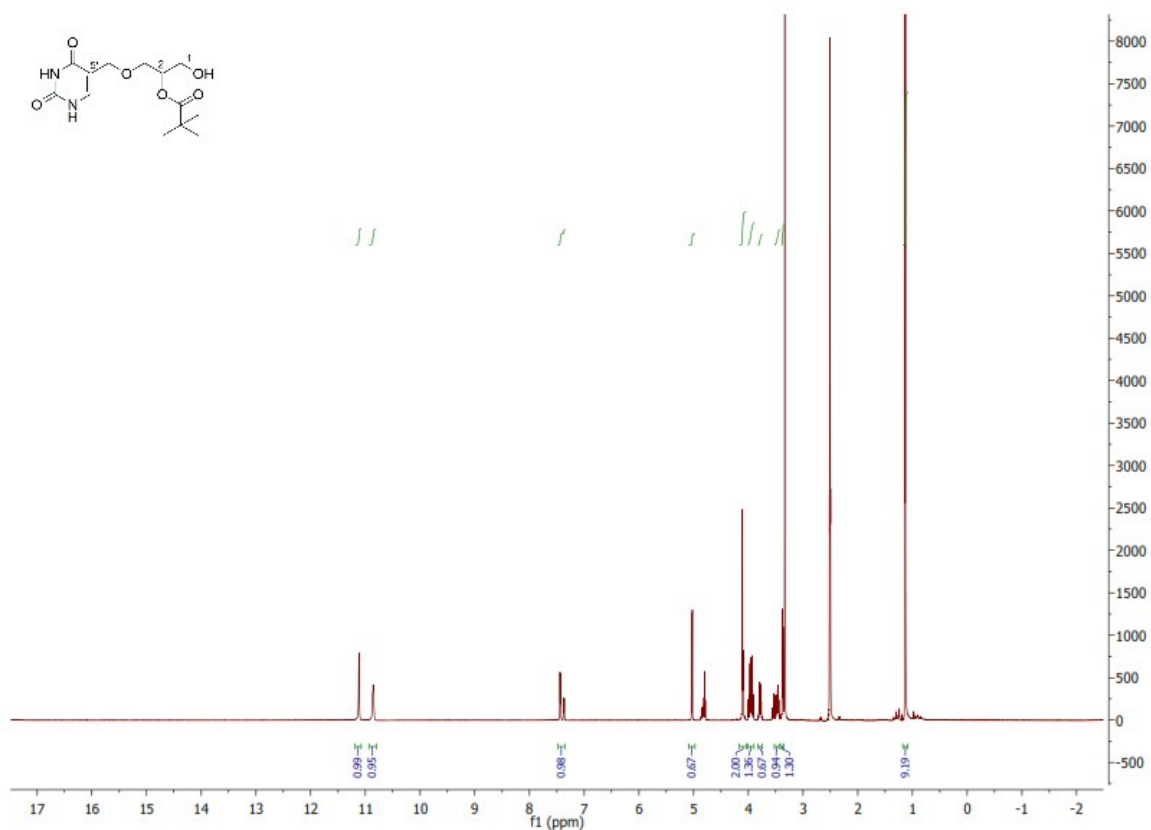
1-((2,4-Dioxo-1,2,3,4-tetrahydropyrimidin-5-yl)methoxy)-3-hydroxypropan-2-yl benzoate (13f)



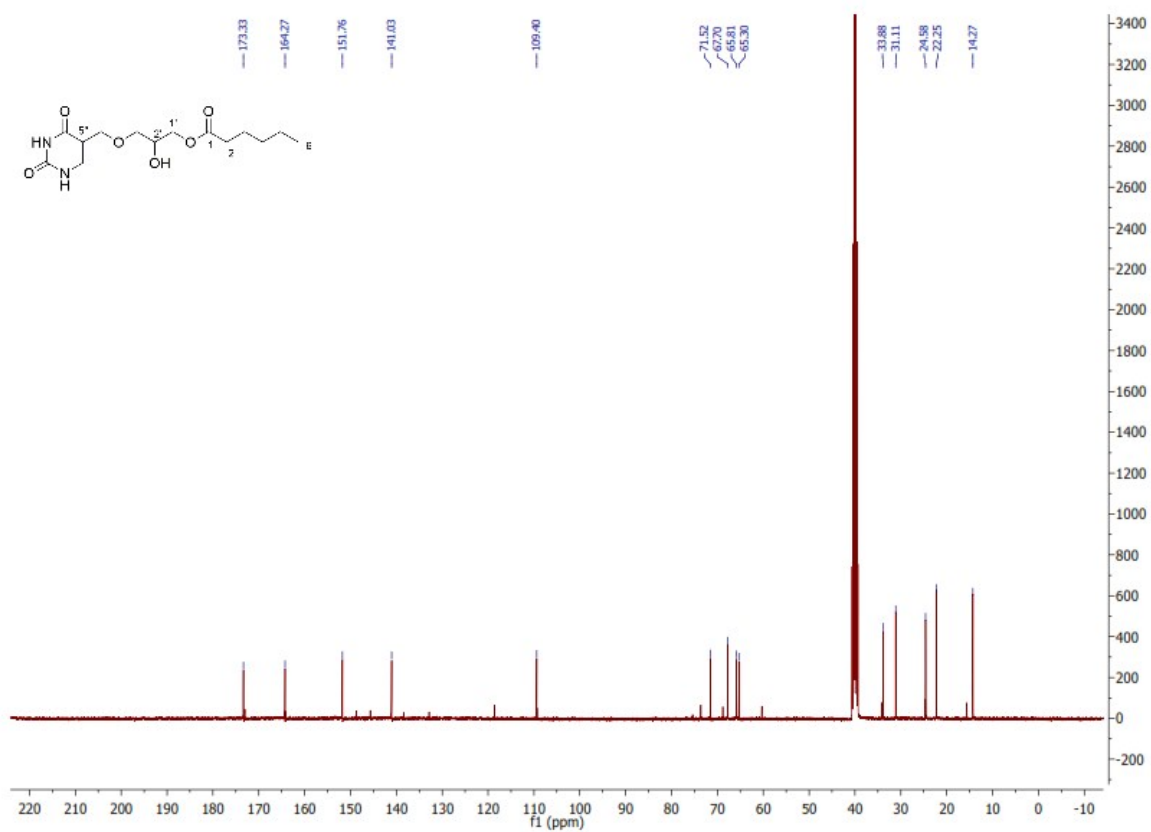
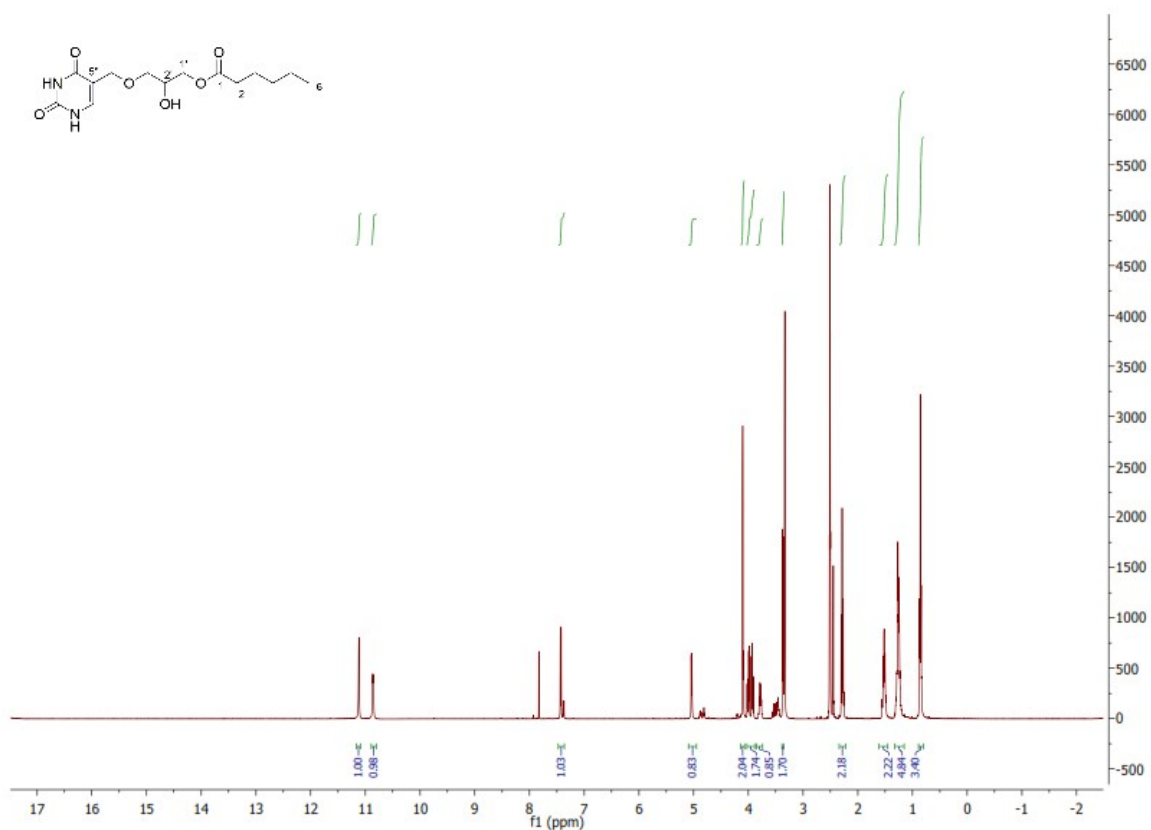
1-((tert-Butyldimethylsilyl)oxy)-3-((2,4-dioxo-1,2,3,4-tetrahydropyrimidin-5-yl)methoxy)propan-2-yl pivalate (13g)



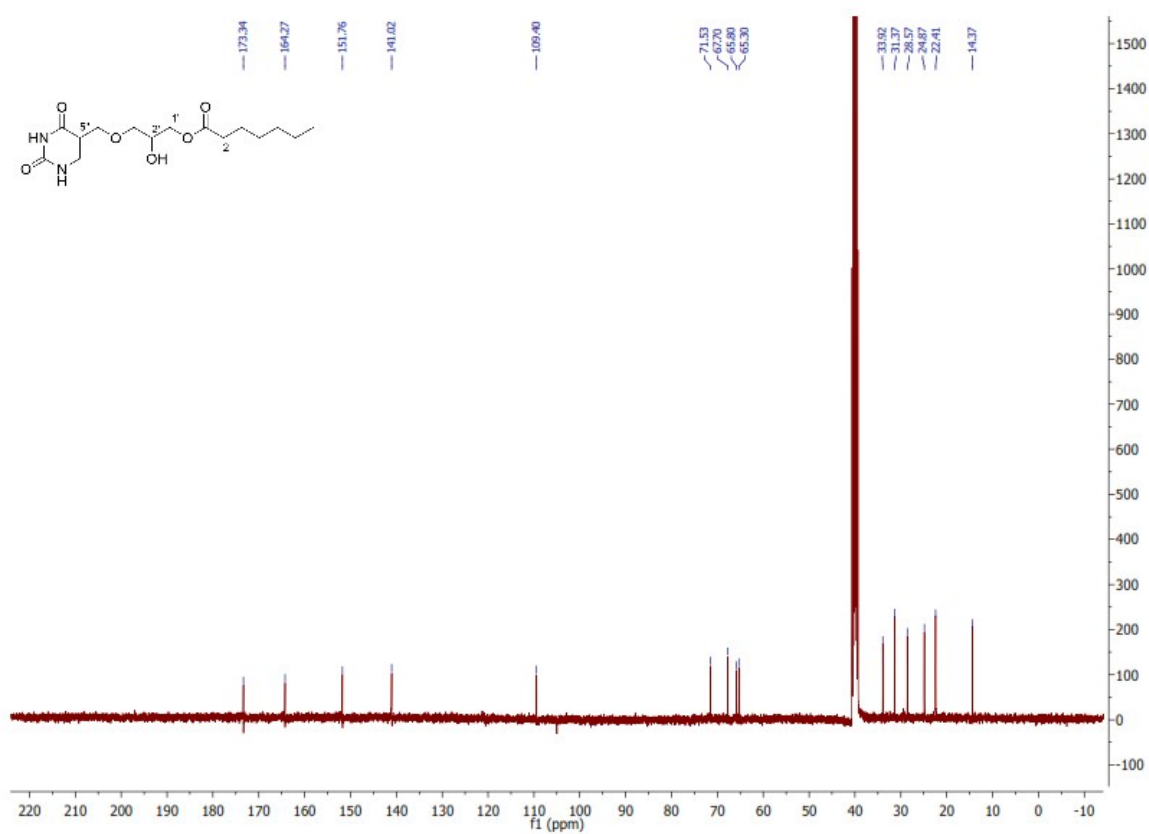
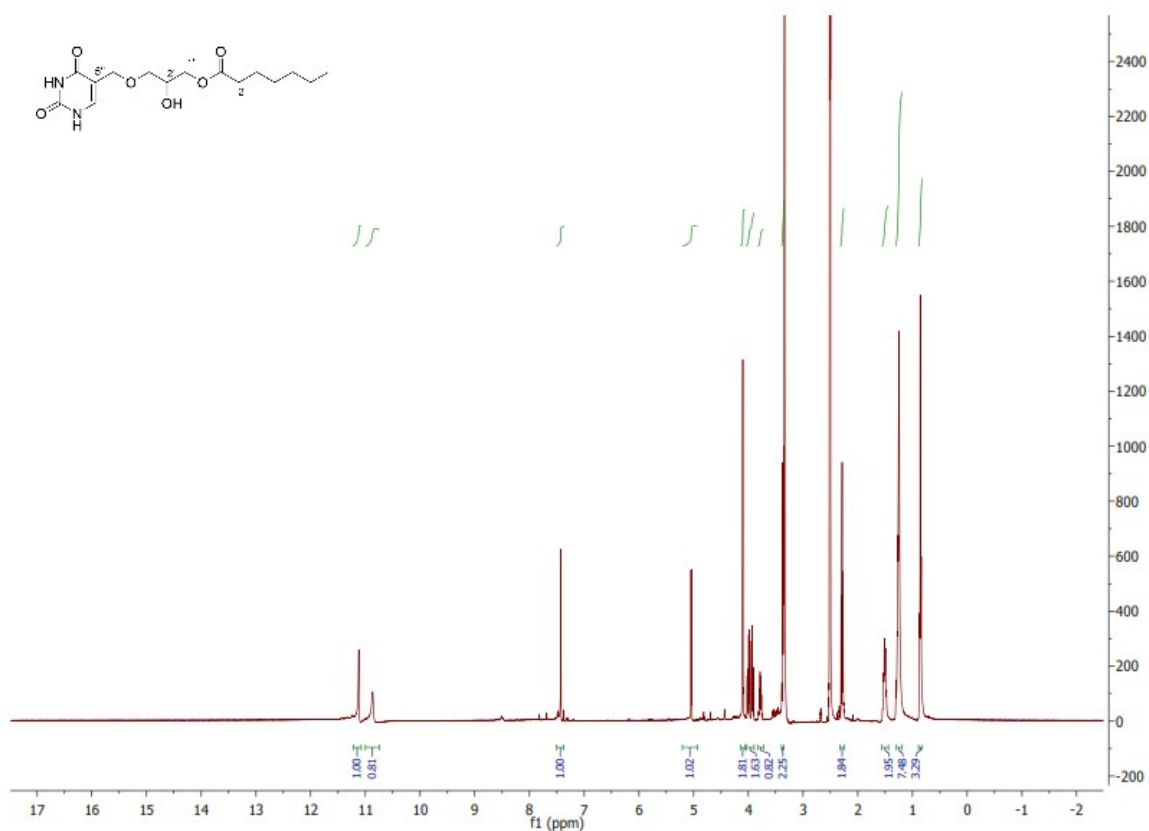
1-((2,4-Dioxo-1,2,3,4-tetrahydropyrimidin-5-yl)methoxy)-3-hydroxypropan-2-yl pivalate (13h)



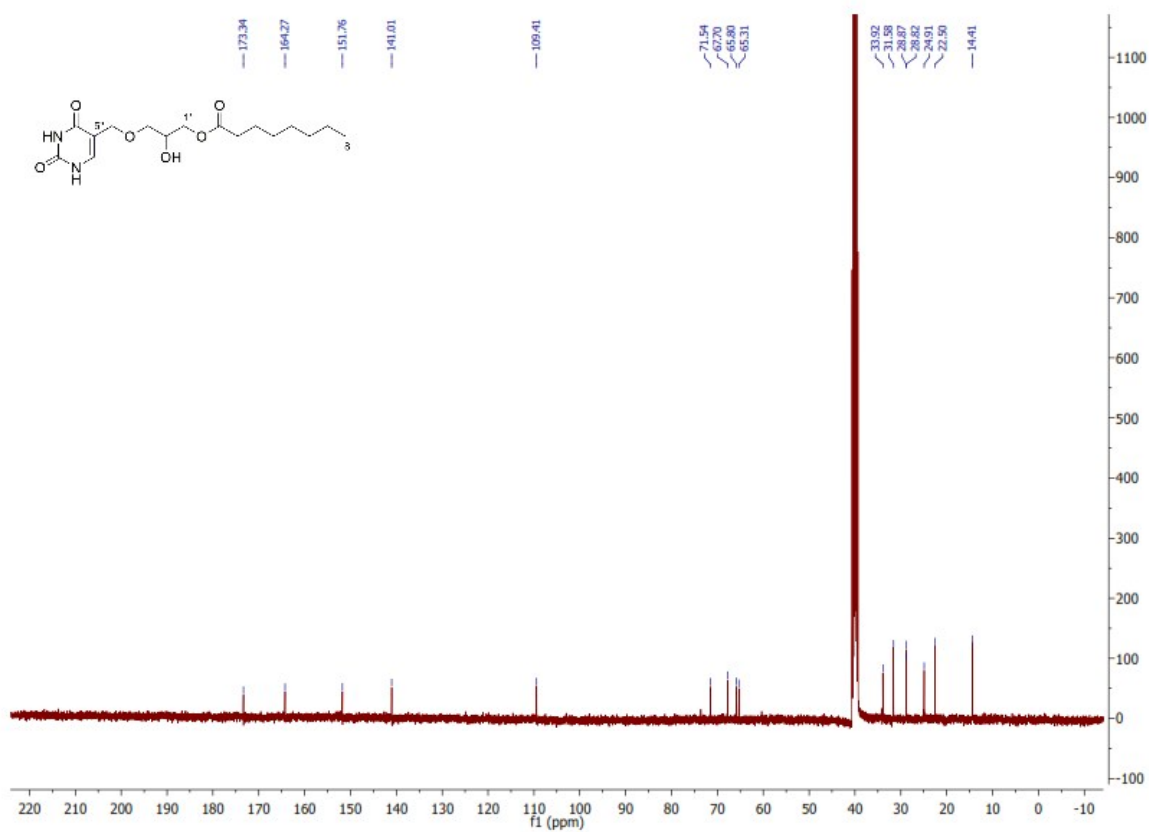
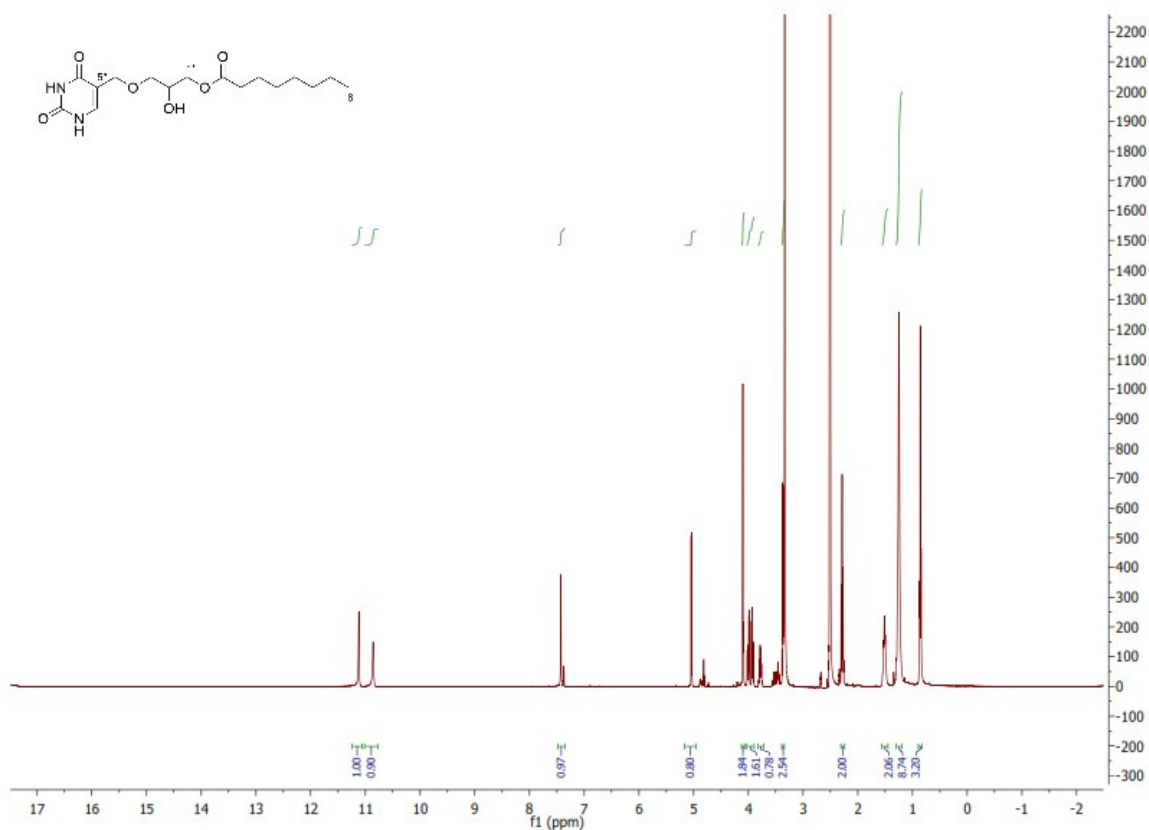
3-((2,4-Dioxo-1,2,3,4-tetrahydropyrimidin-5-yl)methoxy)-2-hydroxypropyl hexanoate (14a)



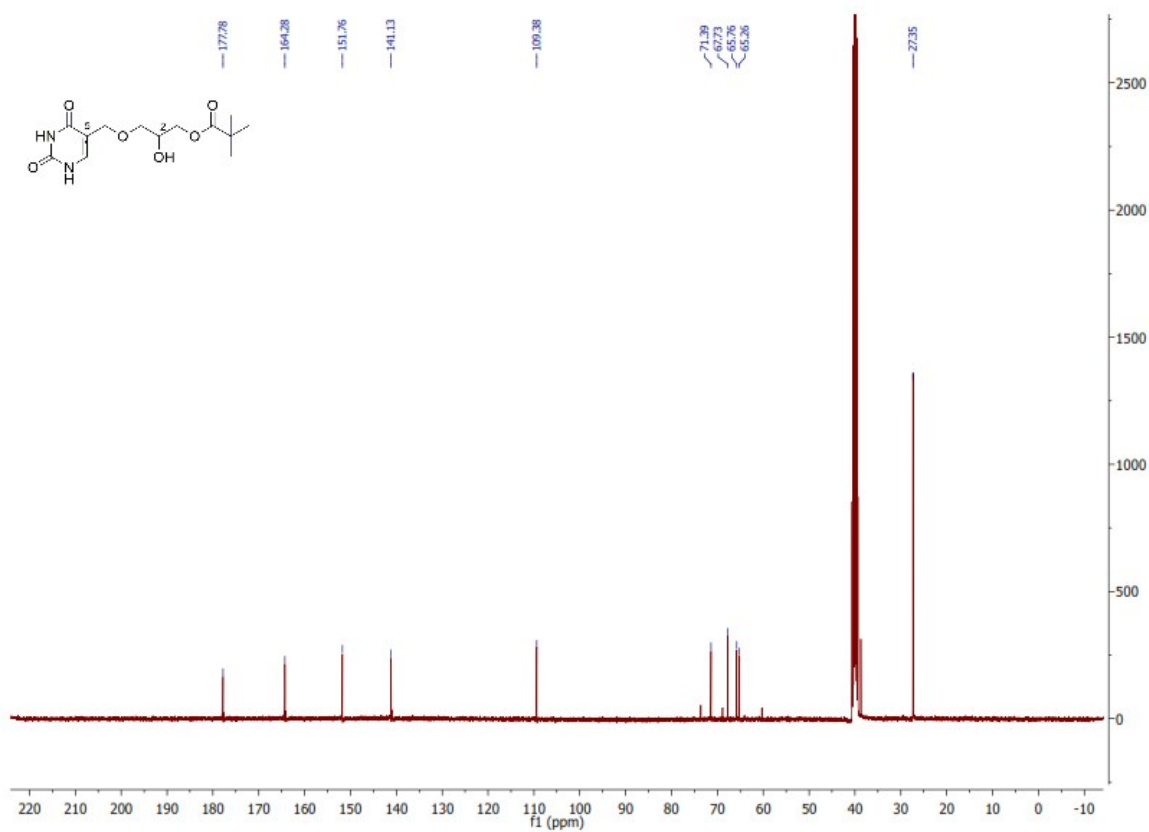
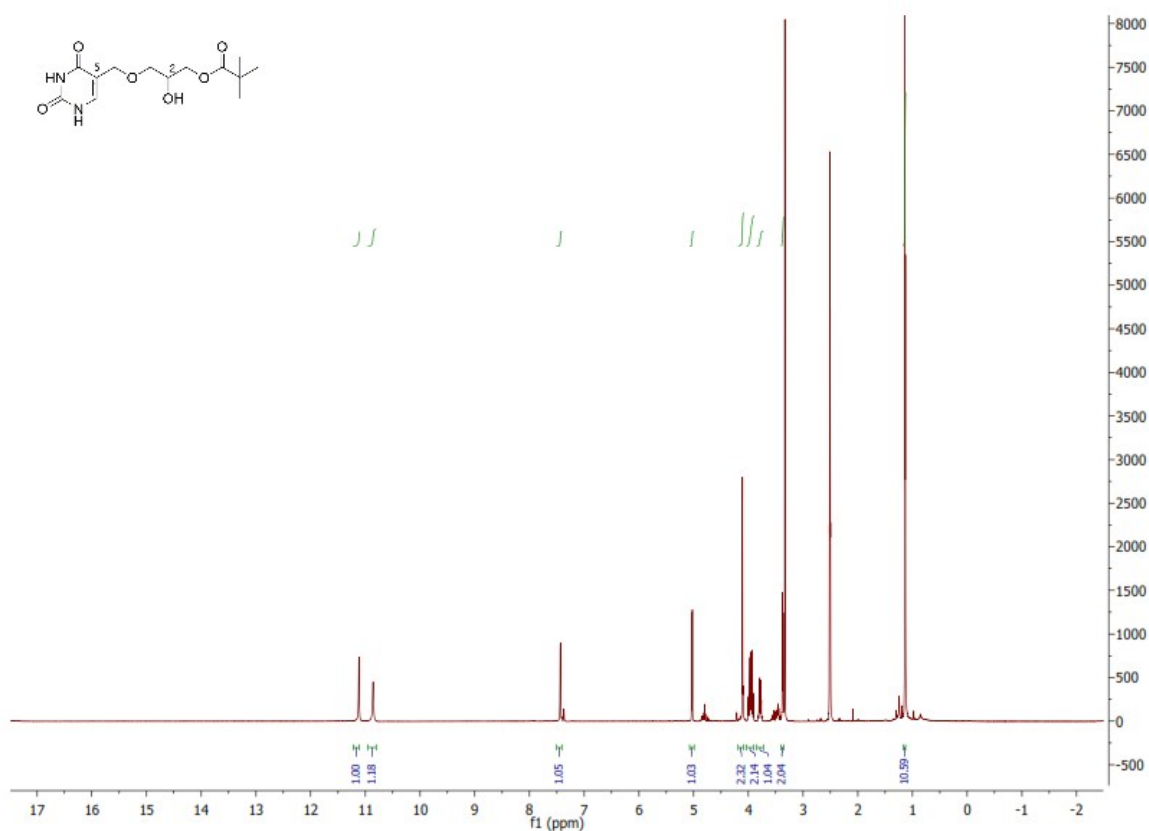
3-((2,4-Dioxo-1,2,3,4-tetrahydropyrimidin-5-yl)methoxy)-2-hydroxypropyl heptanoate (14b)



3-((2,4-Dioxo-1,2,3,4-tetrahydropyrimidin-5-yl)methoxy)-2-hydroxypropyl octanoate (14c)

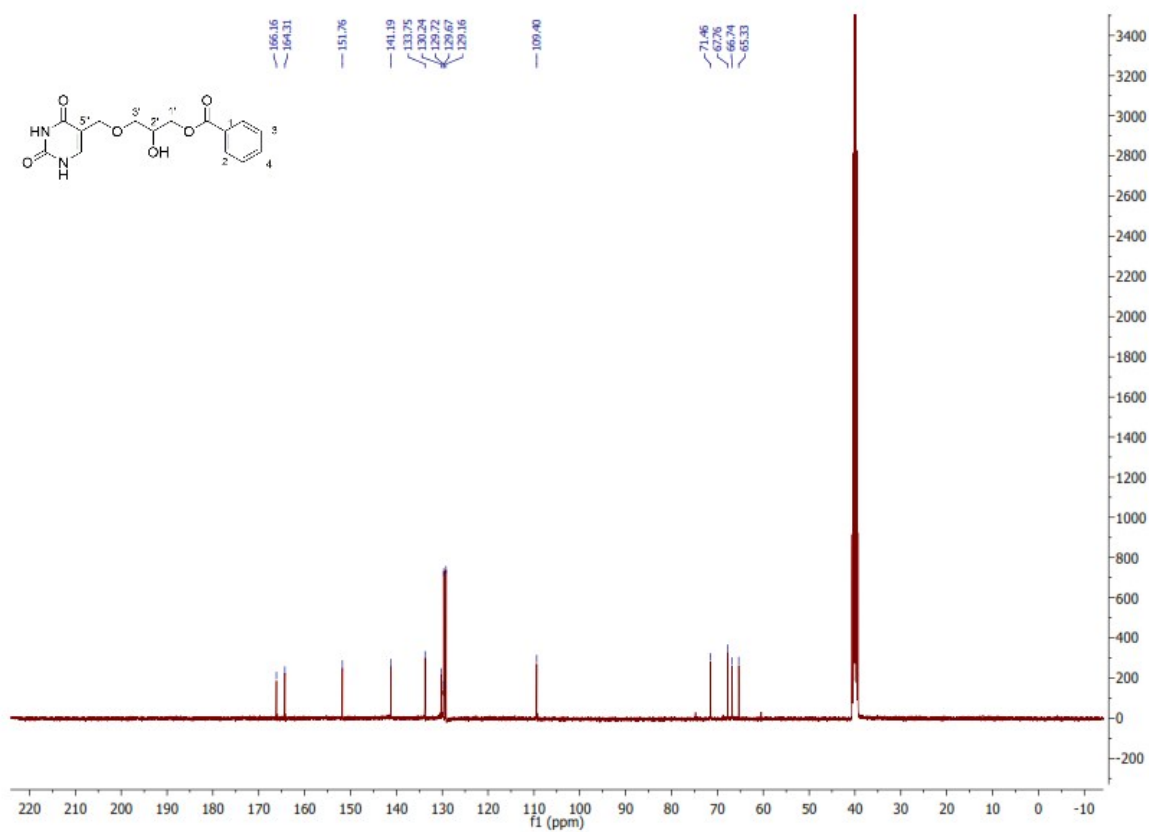
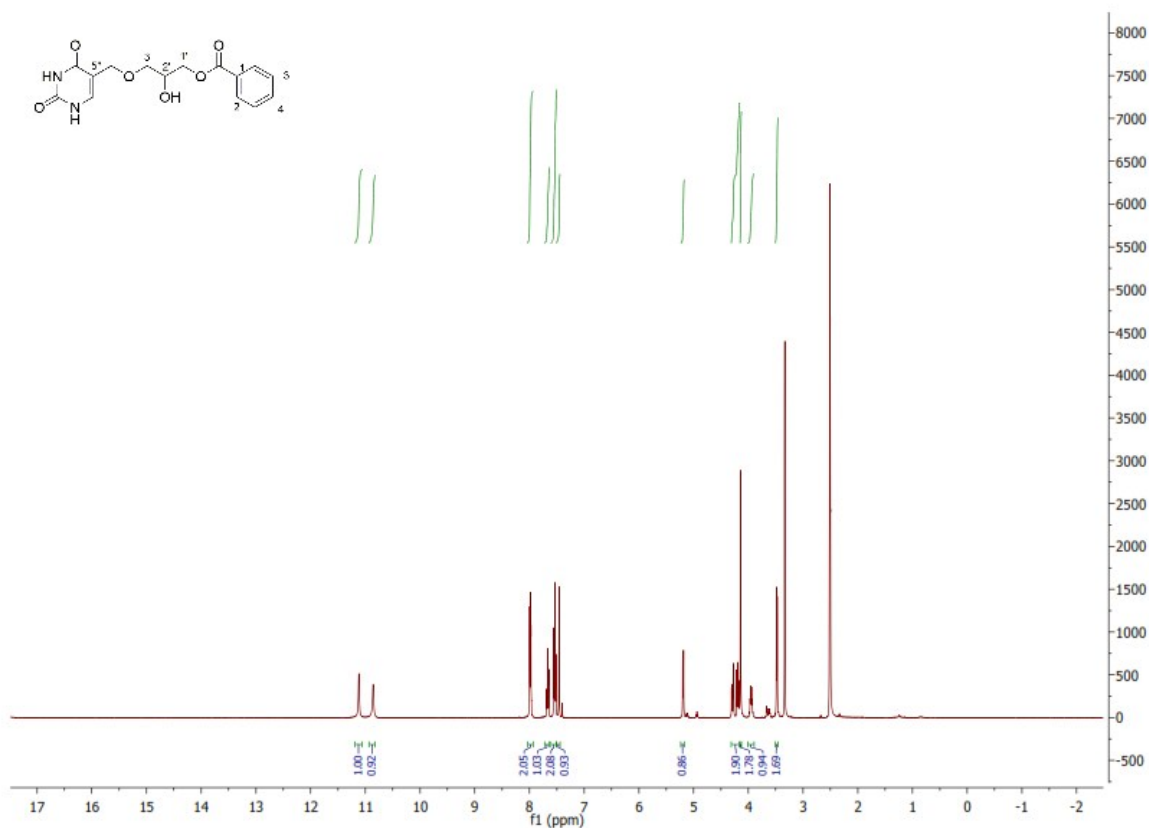


3-((2,4-Dioxo-1,2,3,4-tetrahydropyrimidin-5-yl)methoxy)-2-hydroxypropyl pivalate (14d)

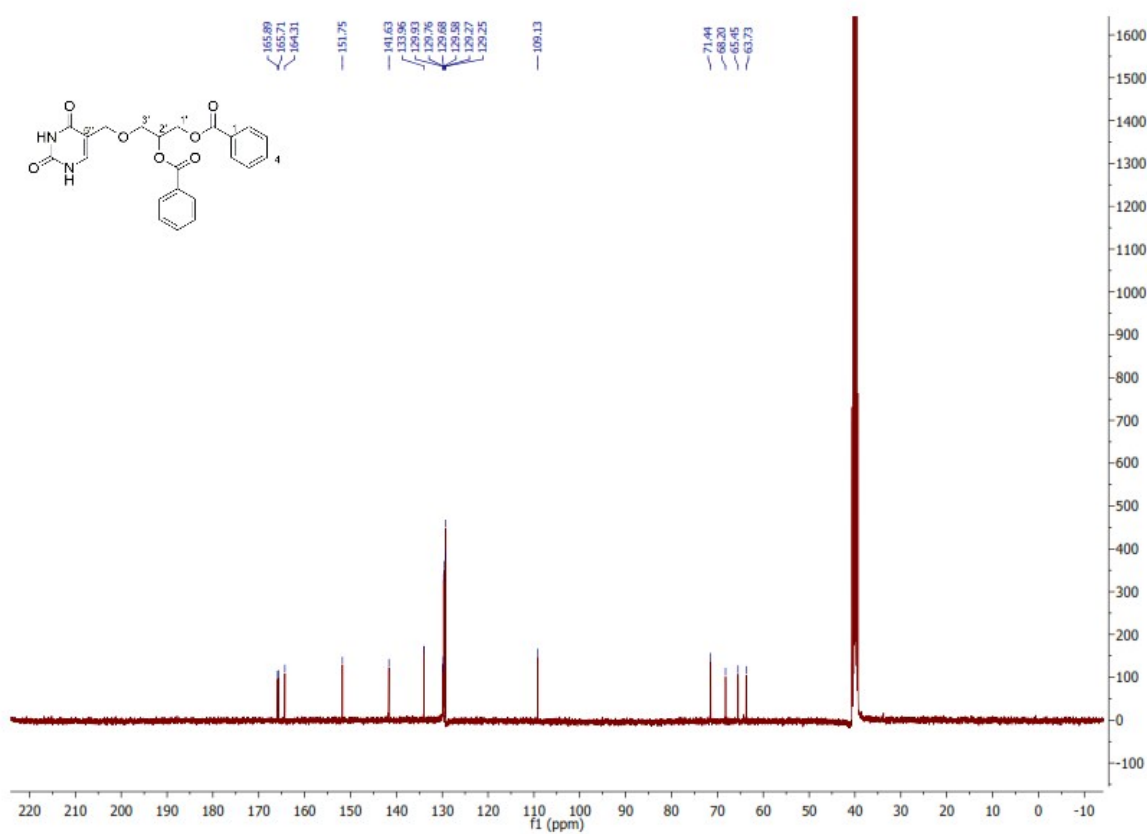
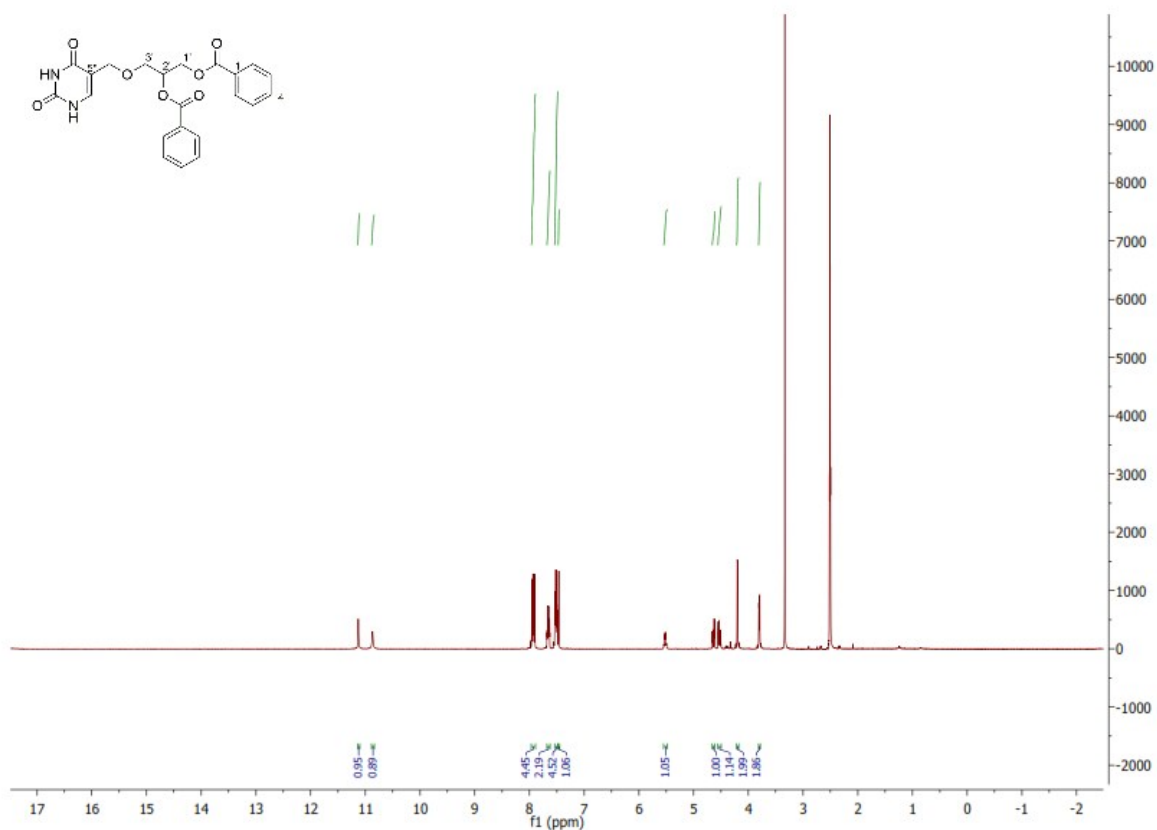


3-((2,4-Dioxo-1,2,3,4-tetrahydropyrimidin-5-yl)methoxy)-2-hydroxypropyl benzoate (14e)

benzoate



3-((2,4-Dioxo-1,2,3,4-tetrahydropyrimidin-5-yl)methoxy)propane-1,2-diyl dibenzoate (14f)



3-((2,4-Dioxo-1,2,3,4-tetrahydropyrimidin-5-yl)methoxy)propane-1,2-diyl diacetate (14g)

