

SUPPORTING INFORMATION FOR
Synthesis, Antitumor Activity, and Mechanism of Action of
Benzo[*b*]chromeno[6,5-*g*][1,8]naphthyridin-7-one Analogs of Acronycine

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Michel^{*,§ **}

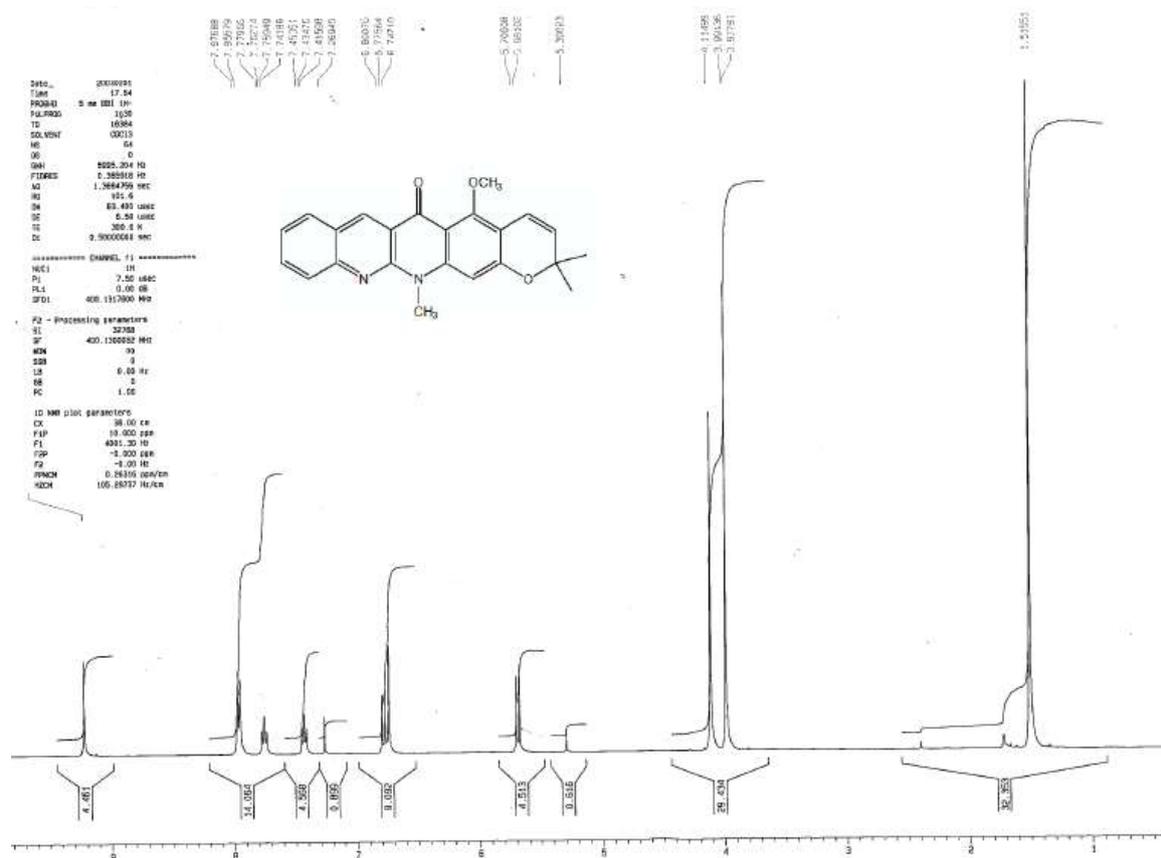
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^{**}Dedicated to Professor François Tillequin

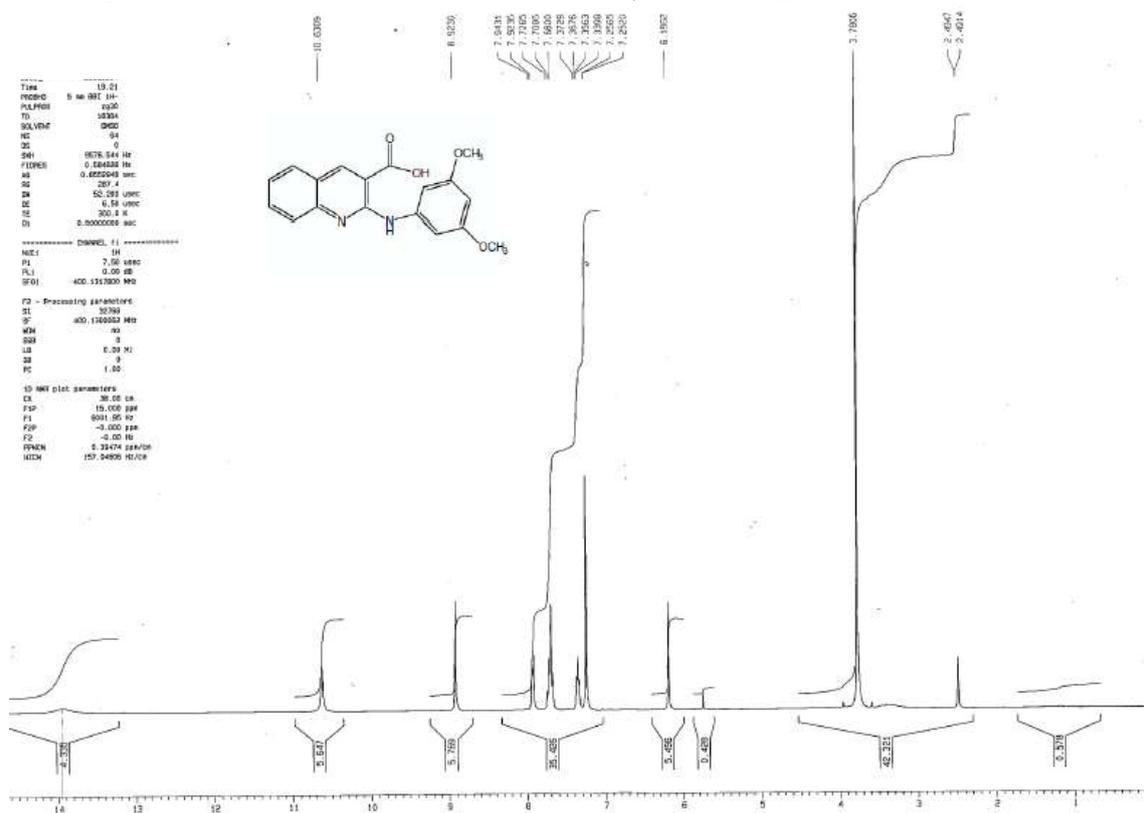
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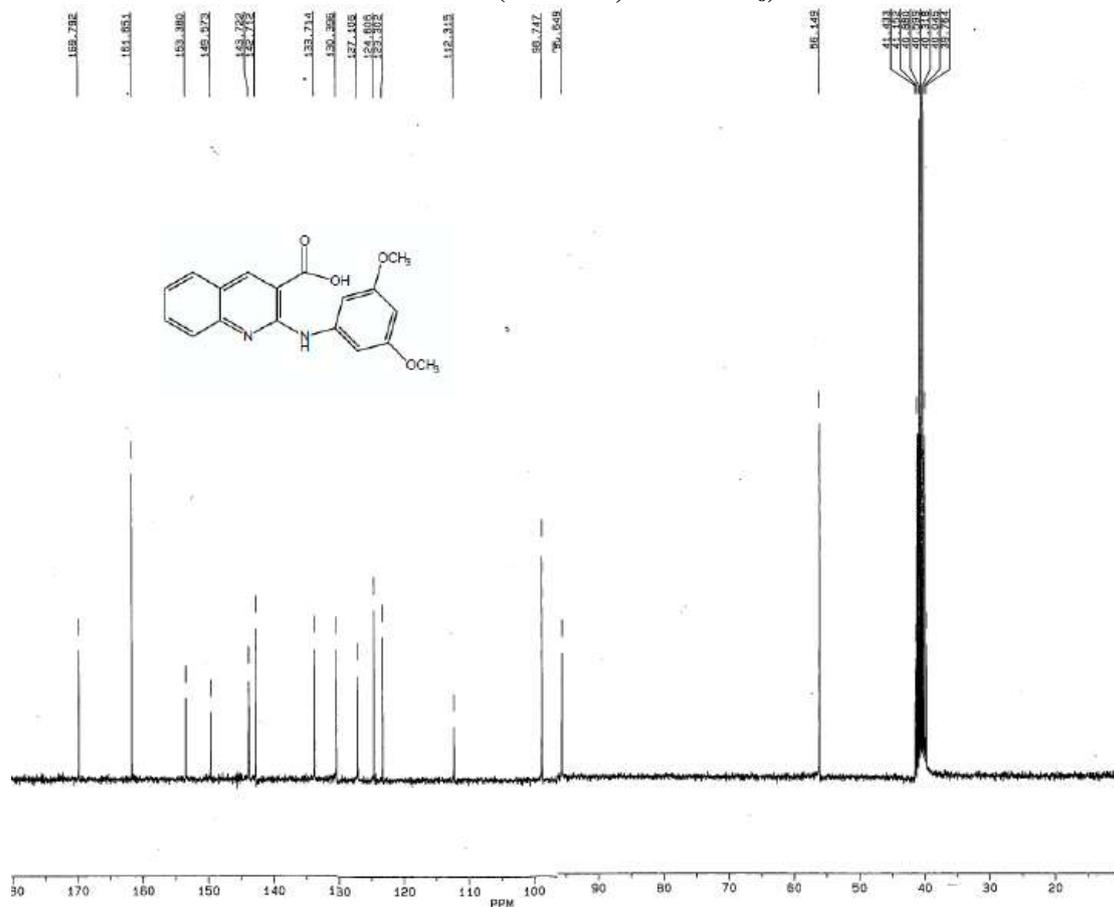
5-Methoxy-2,2,13-trimethyl-2,13-dihydro-6H-benzo[b]chromeno[7,6-g][1,8]naphthyridin-6-one (5)
¹H NMR (400 MHz, CDCl₃)



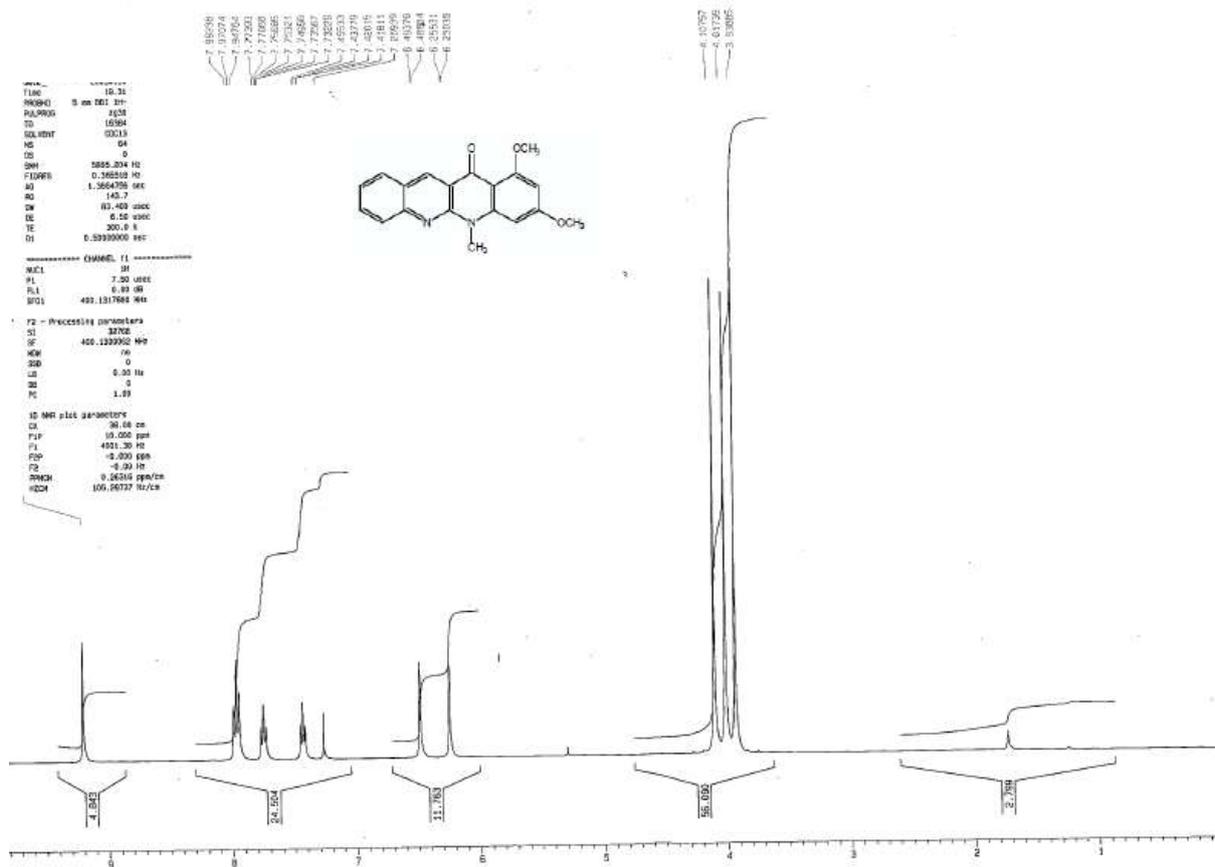
2-(3,5-Dimethoxyphenylamino)-3-quinolinecarboxylic acid (9)
¹H NMR (400 MHz, DMSO-d₆)



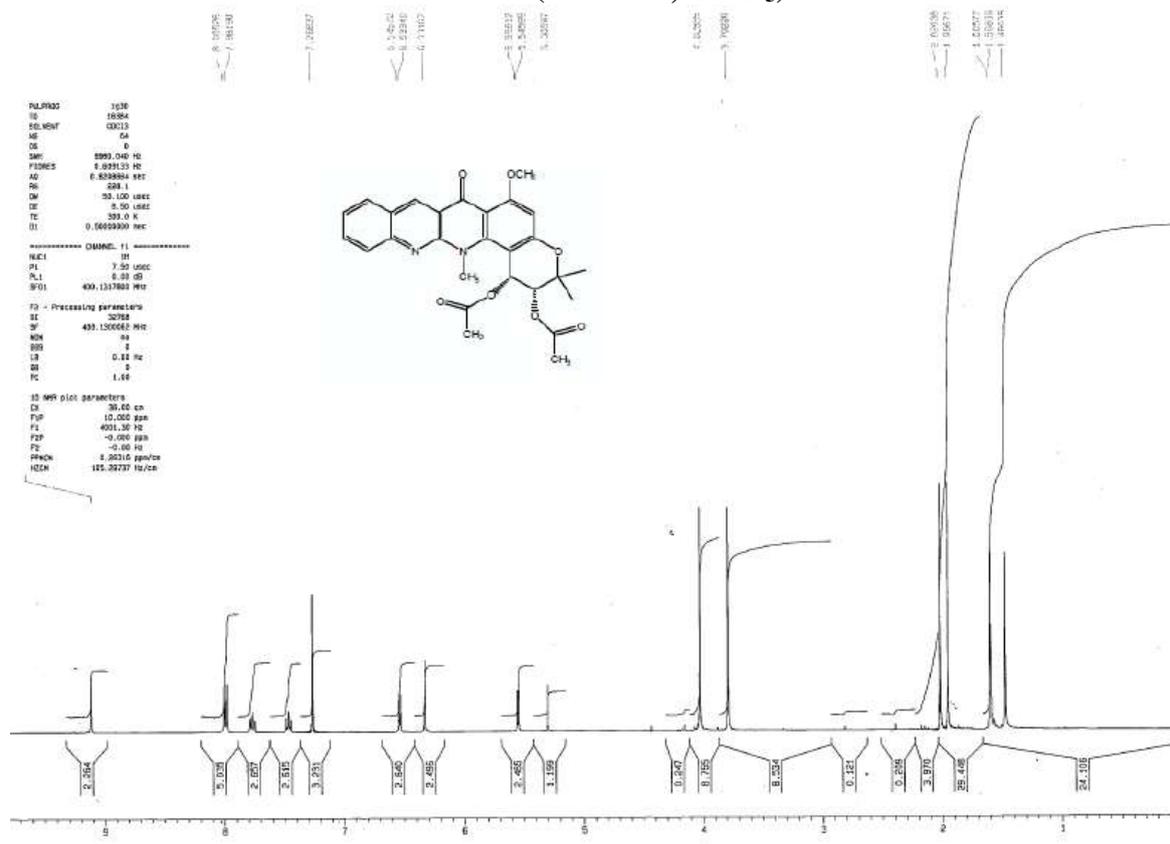
2-(3,5-Dimethoxyphenylamino)-3-quinolinecarboxylic acid (9)
¹³C NMR (75 MHz, DMSO-d₆)



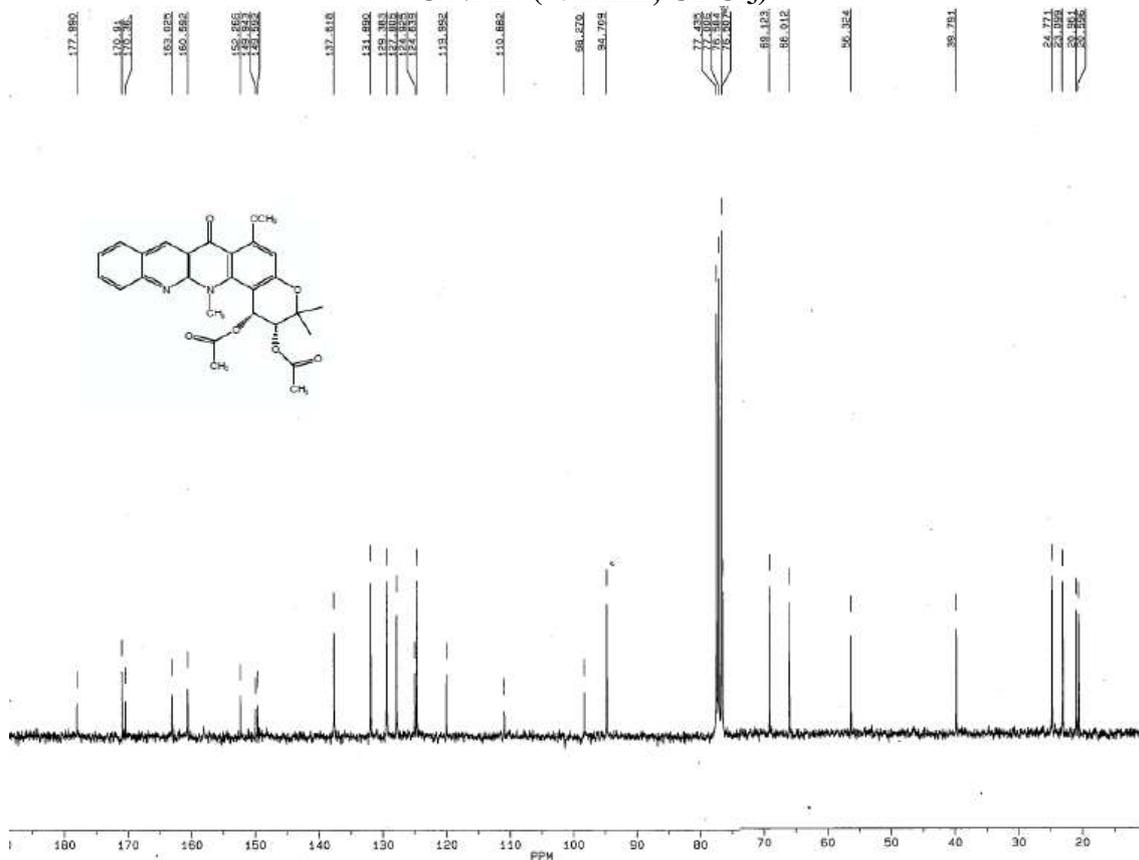
8,10-Dimethoxy-6-methyldibenzo[*b,g*][1,8]naphthyridin-11(6*H*)-one (11)
¹H NMR (400 MHz, CDCl₃)



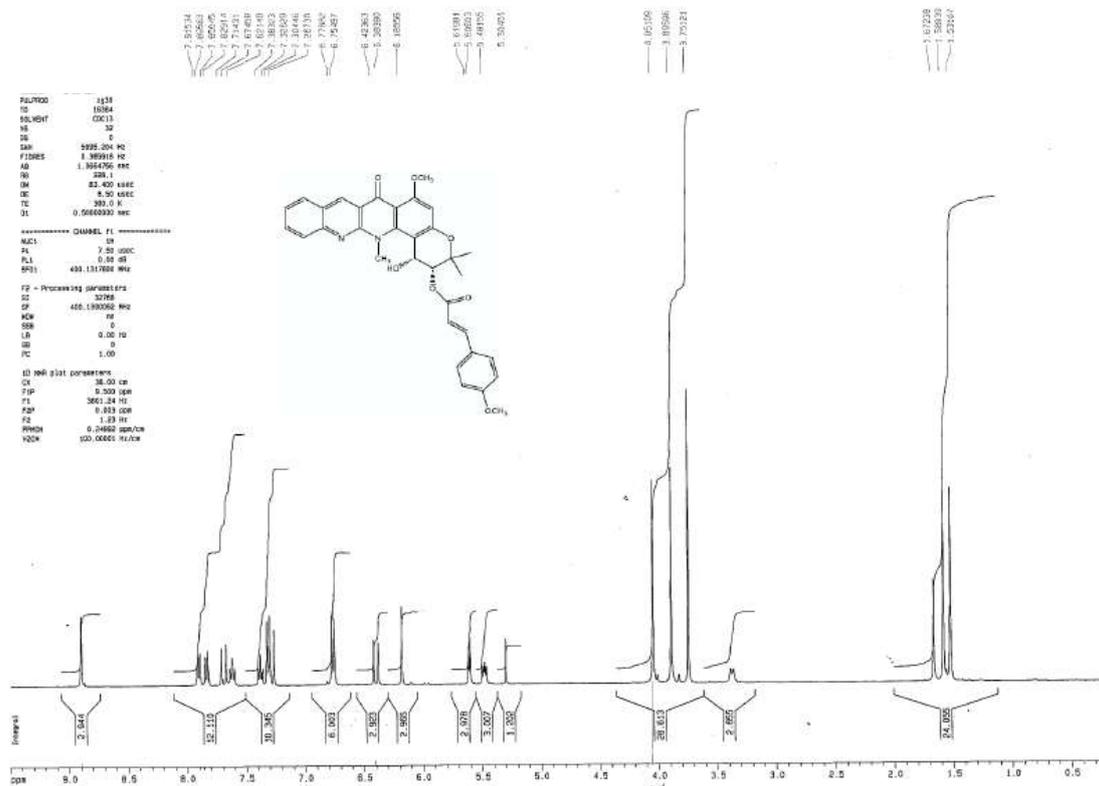
(±)-*cis*-1,2-Diacetoxy-6-methoxy-3,3,14-trimethyl-1,2,3,14-tetrahydro-7*H*-benzo[*b*]chromeno[6,5-*g*][1,8]naphthyridin-7-one (21)
¹H NMR (400 MHz, CDCl₃)



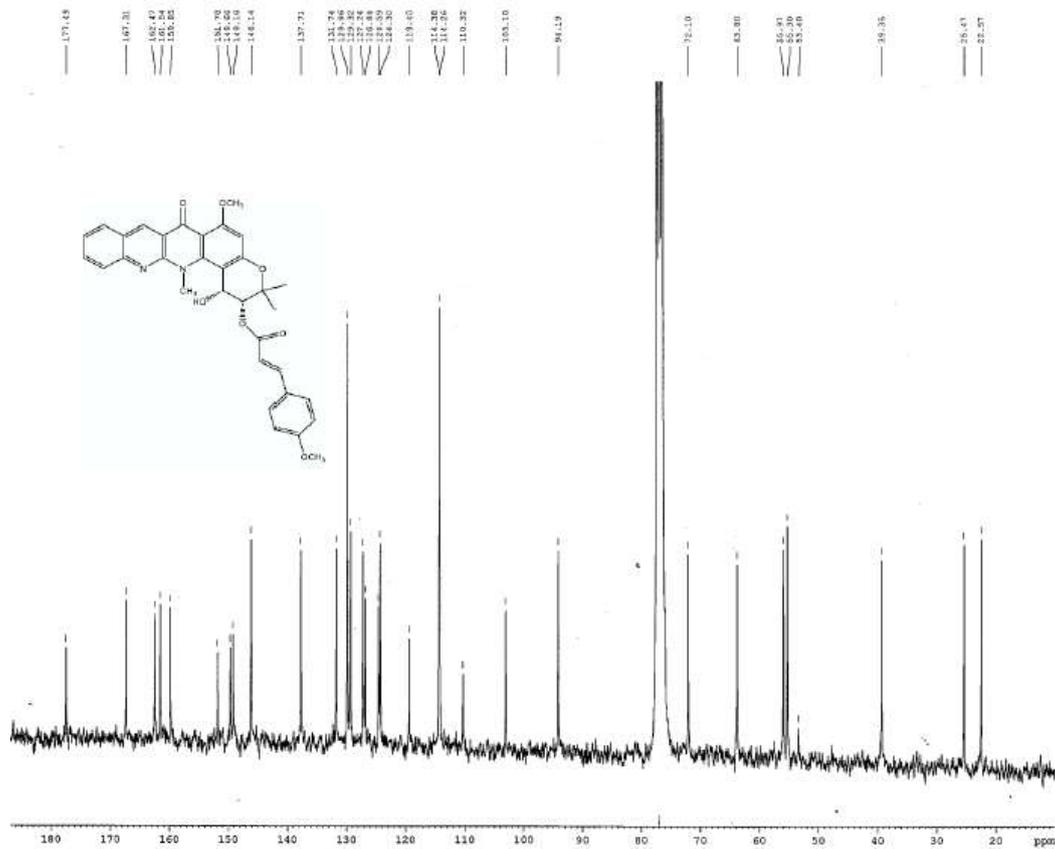
(±)-*cis*-1,2-Diacetoxy-6-methoxy-3,3,14-trimethyl-1,2,3,14-tetrahydro-7*H*-benzo[*b*]chromeno[6,5-*g*][1,8]naphthyridin-7-one (21)
¹³C NMR (75 MHz, CDCl₃)



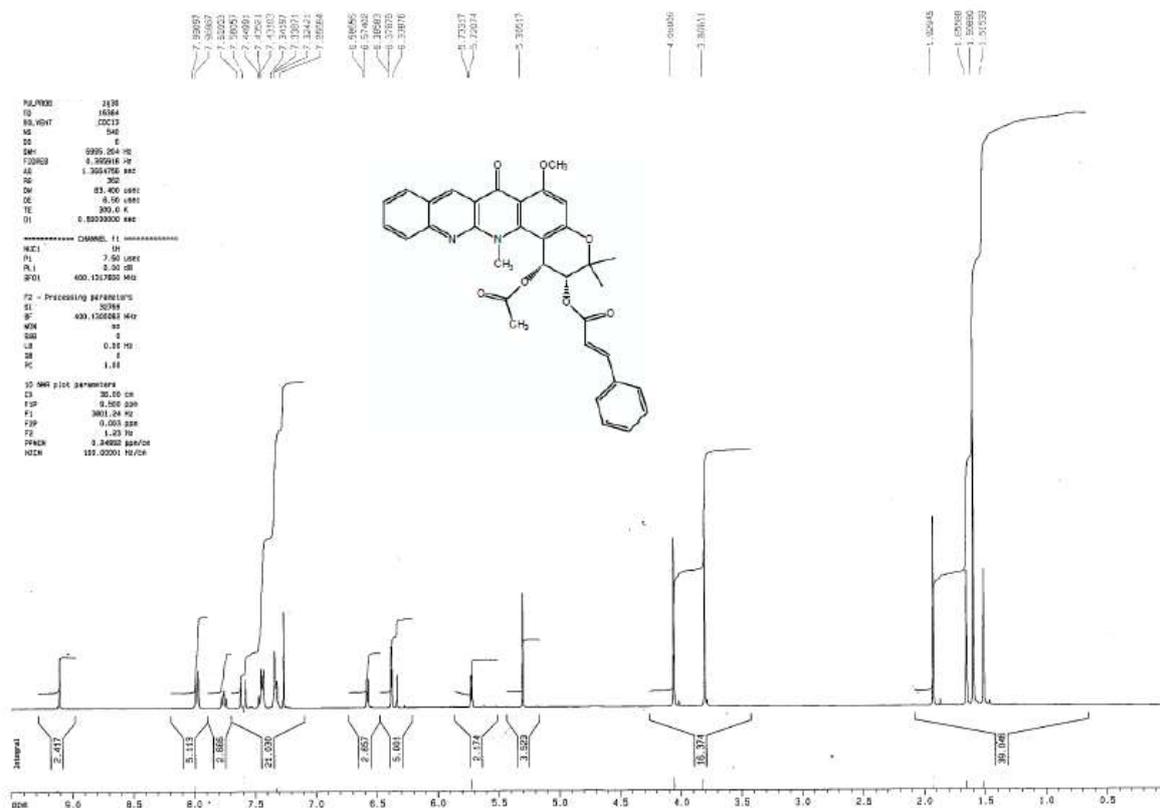
(±)-*cis*-1-Hydroxy-6-methoxy-2-(4-methoxycinnamoyloxy)-3,3,14-trimethyl-1,2,3,14-tetrahydro-7*H*-benzo[*b*]chromeno[6,5-*g*][1,8]naphthyridin-7-one (26)
¹H NMR (400 MHz, CDCl₃)



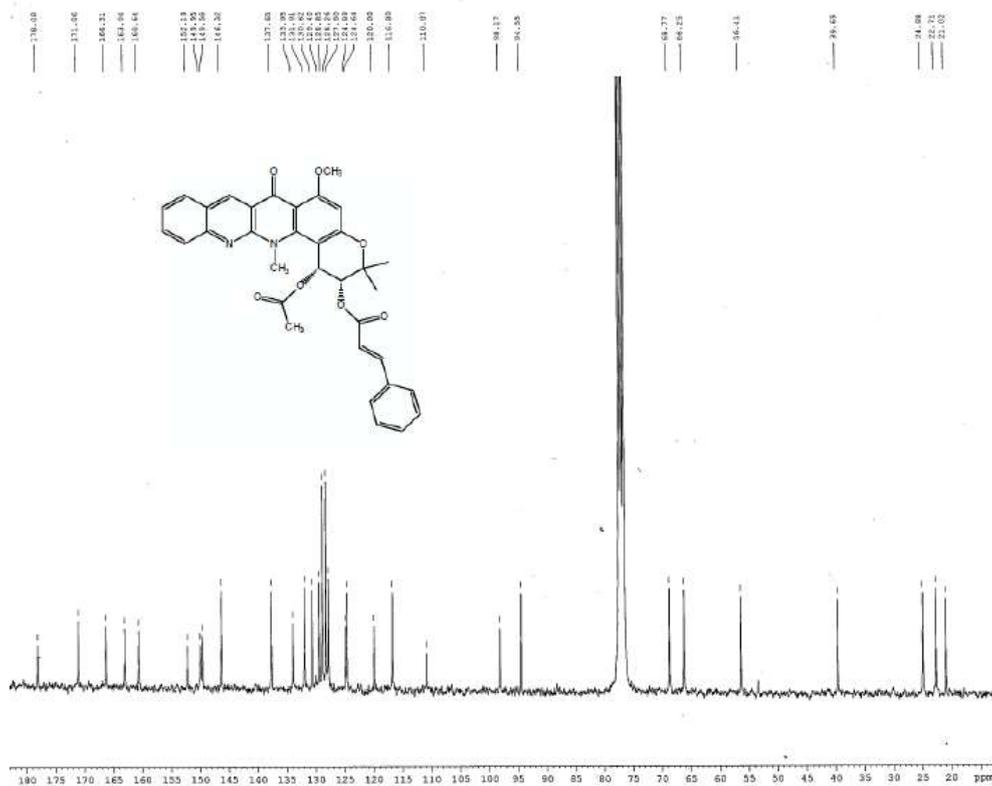
(±)-*cis*-1-Hydroxy-6-methoxy-2-(4-methoxycinnamoyloxy)-3,3,14-trimethyl-1,2,3,14-tetrahydro-7*H*-benzo[*b*]chromeno[6,5-*g*][1,8]naphthyridin-7-one (26)
¹³C NMR (75 MHz, CDCl₃)



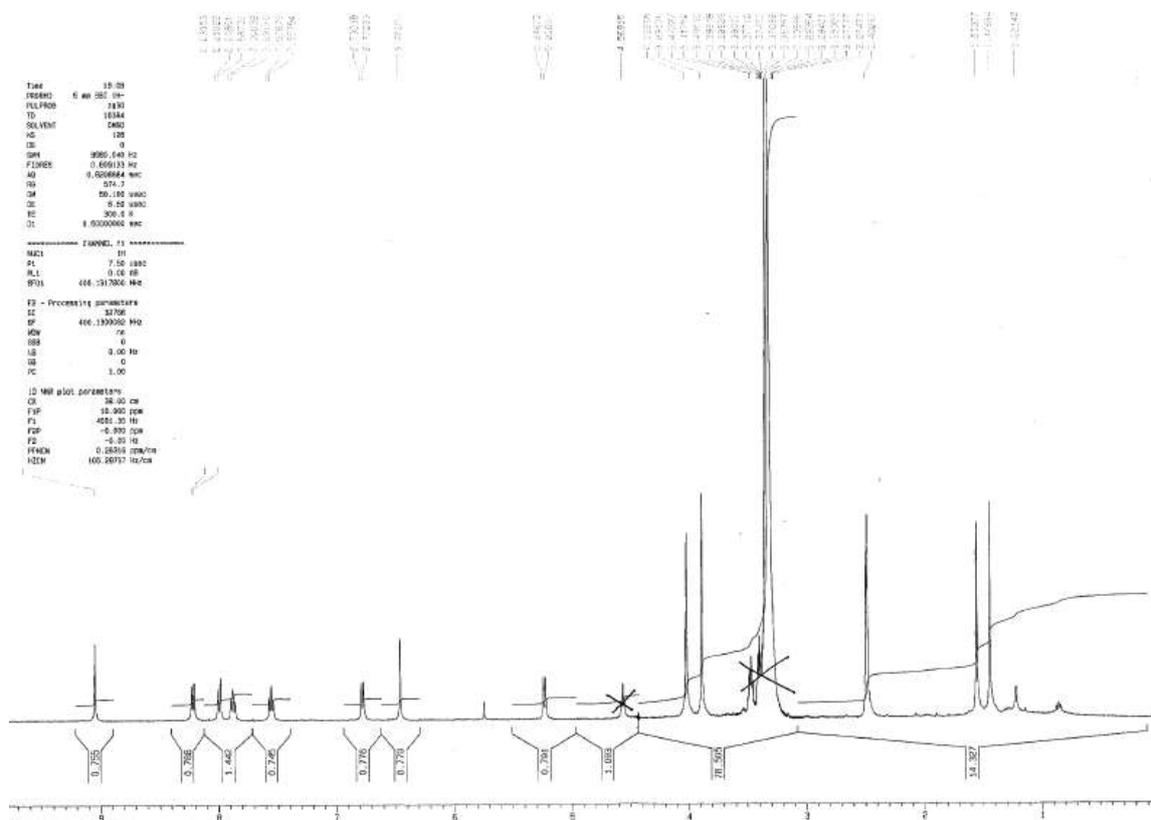
(±)-*cis*-1-Acetoxy-2-cinnamoyloxy-6-methoxy-3,3,14-trimethyl-1,2,3,14-tetrahydro-7*H*-benzo[*b*]chromeno[6,5-*g*][1,8]naphthyridin-7-one (28)
¹H NMR (400 MHz, CDCl₃)



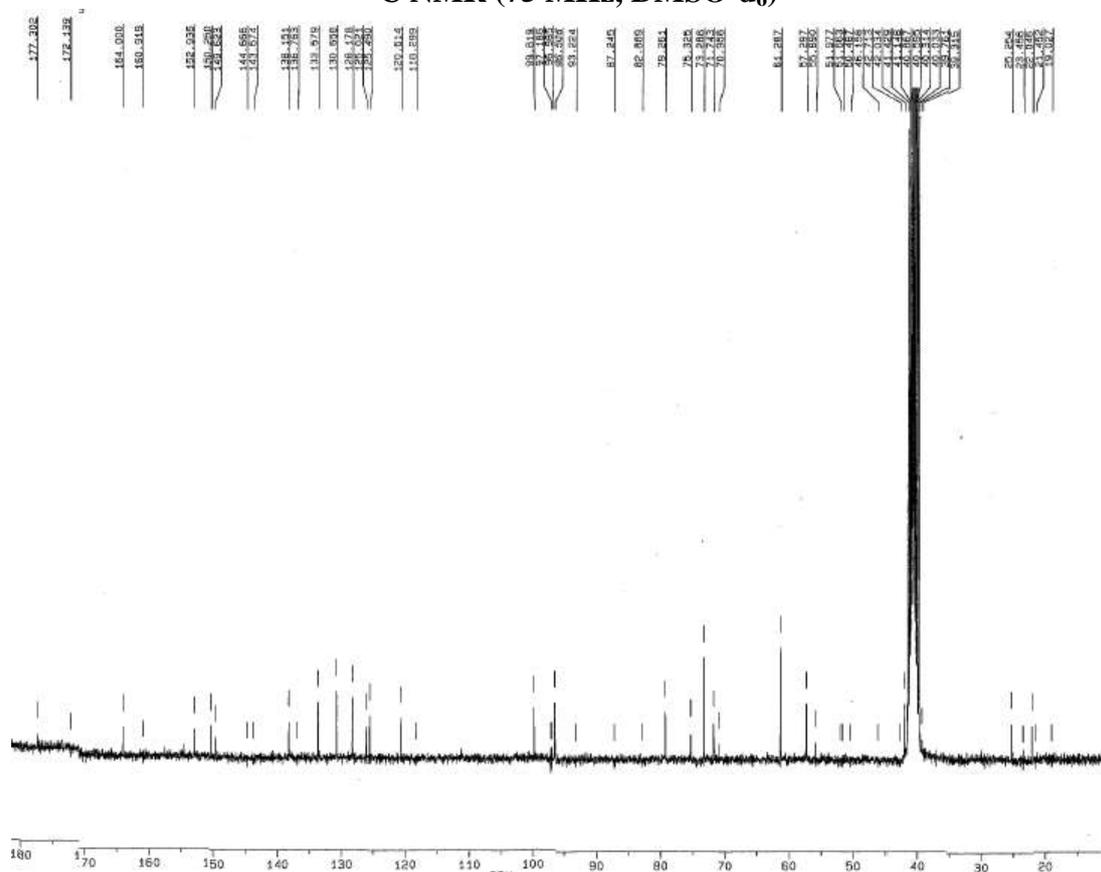
(±)-*cis*-1-Acetoxy-2-cinnamoyloxy-6-methoxy-3,3,14-trimethyl-1,2,3,14-tetrahydro-7*H*-benzo[*b*]chromeno[6,5-*g*][1,8]naphthyridin-7-one (28)
¹³C NMR (75 MHz, CDCl₃)



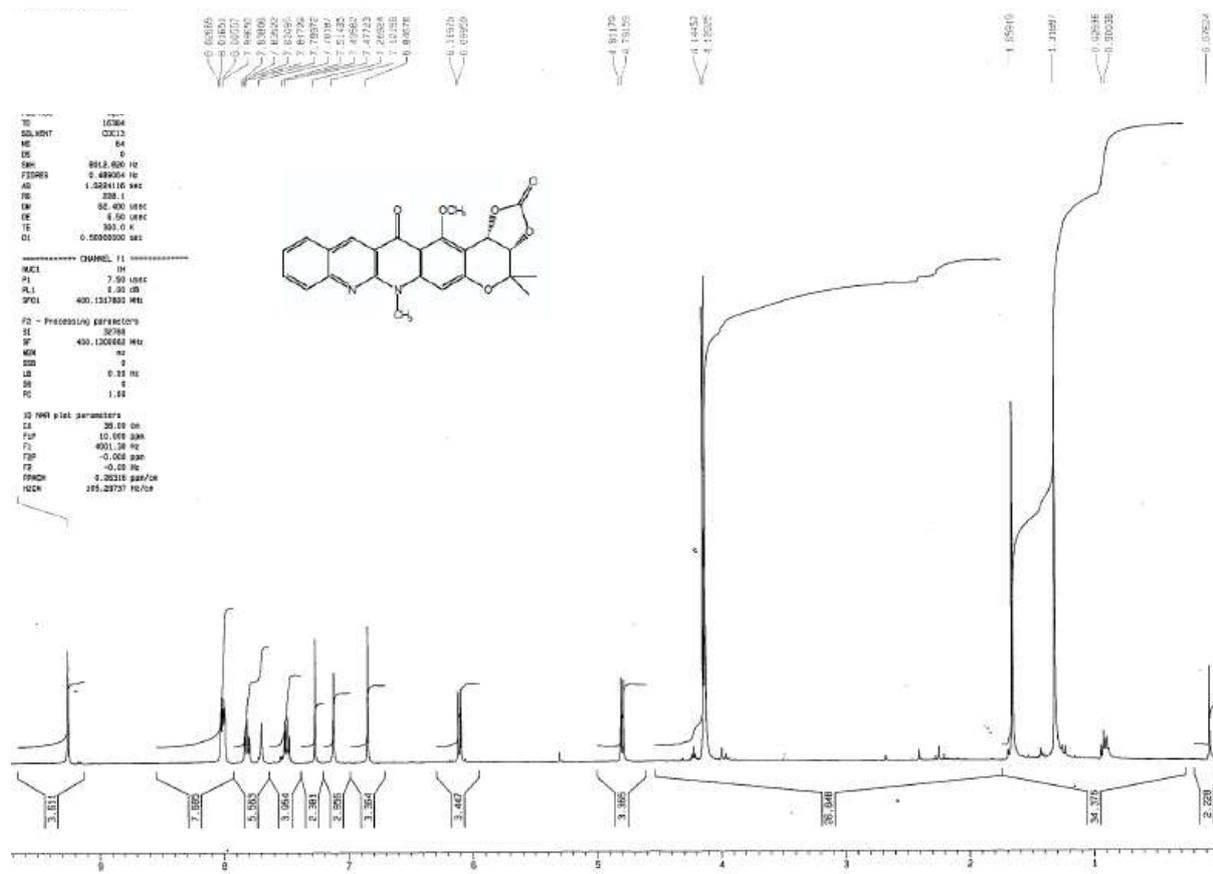
(±)-*cis*-1,2-Di-*O*-carbonyl-1,2-dihydroxy-6-methoxy-3,3,14-trimethyl-1,2,3,14-tetrahydro-7*H*-benzo[*b*]chromeno[6,5-*g*][1,8]naphthyridin-7-one (31)
¹H NMR (400 MHz, DMSO-d₆)



(±)-*cis*-1,2-Di-*O*-carbonyl-1,2-dihydroxy-6-methoxy-3,3,14-trimethyl-1,2,3,14-tetrahydro-7*H*-benzo[*b*]chromeno[6,5-*g*][1,8]naphthyridin-7-one (31)
¹³C NMR (75 MHz, DMSO-d₆)



(±)-*cis*-3,4-Di-*O*-carbonyl-3,4-dihydroxy-5-methoxy-2,2,13-trimethyl-2,3,4,13-tetrahydro-6*H*-benzo[*b*]chromeno[7,6-*g*][1,8]naphthyridin-6-one (33)
¹H NMR (400 MHz, CDCl₃)



(±)-*cis*-3,4-Di-*O*-carbonyl-3,4-dihydroxy-5-methoxy-2,2,13-trimethyl-2,3,4,13-tetrahydro-6*H*-benzo[*b*]chromeno[7,6-*g*][1,8]naphthyridin-6-one (33)
¹³C NMR (75 MHz, CDCl₃)

