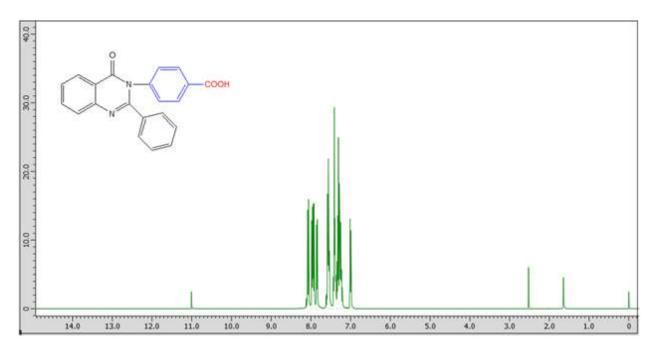
## **Supplementary Materials**

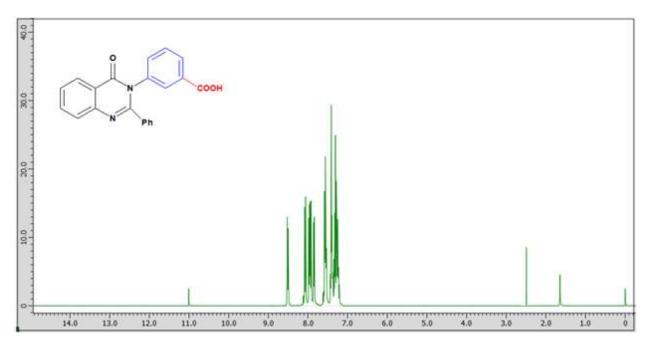
## Synthesis, in silico and in vitro assessment of new quinazolinones as anticancer agents via potential AKT inhibition

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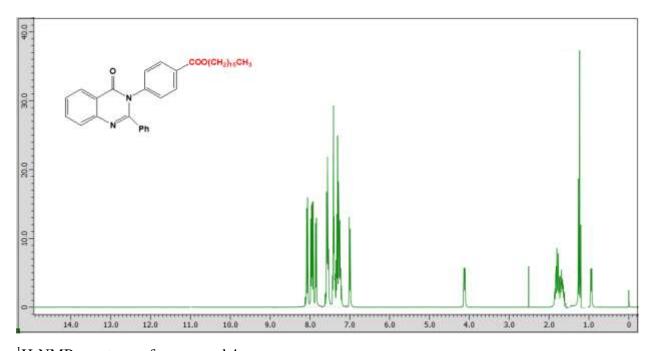
- <sup>1</sup> Organic Chemistry, Chemistry Department, Faculty of Science, Tanta University, Tanta 31527, Egypt
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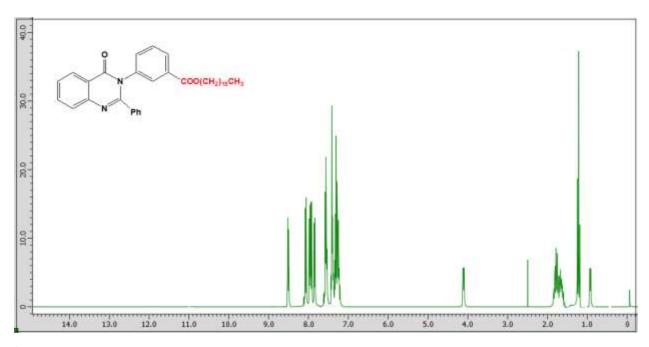
<sup>1</sup>H-NMR spectrum of compound 2.



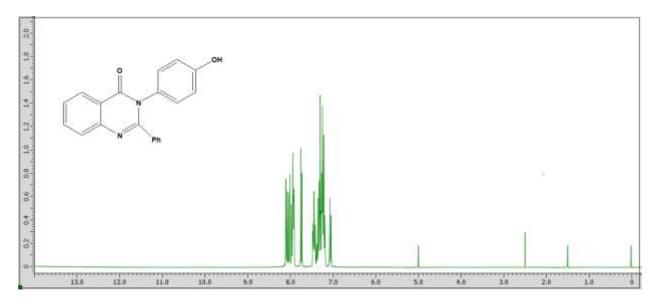
<sup>1</sup>H-NMR spectrum of compound 3.



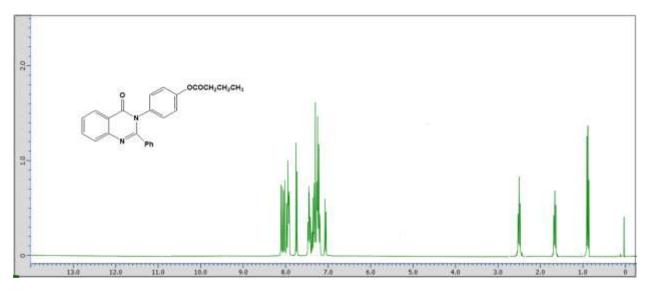
<sup>1</sup>H-NMR spectrum of compound 4.



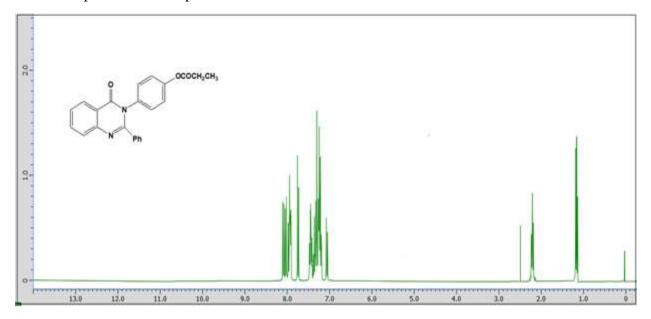
<sup>1</sup>H-NMR spectrum of compound 5.



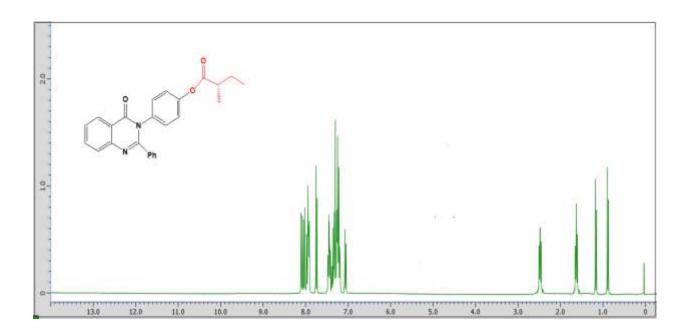
<sup>1</sup>H-NMR spectrum of compound 6.



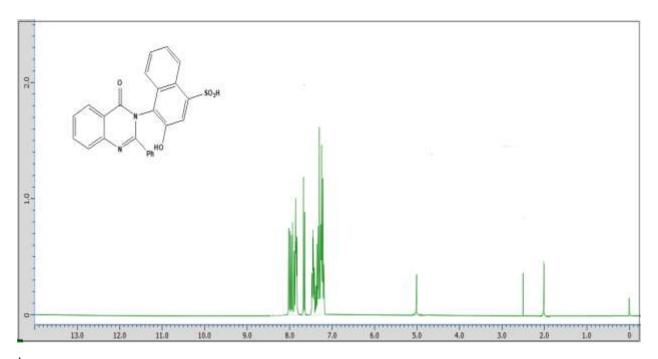
<sup>1</sup>H-NMR spectrum of compound 7.



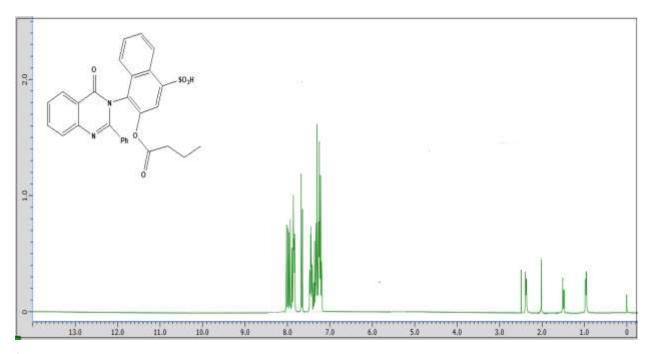
<sup>1</sup>H-NMR spectrum of compound 8.



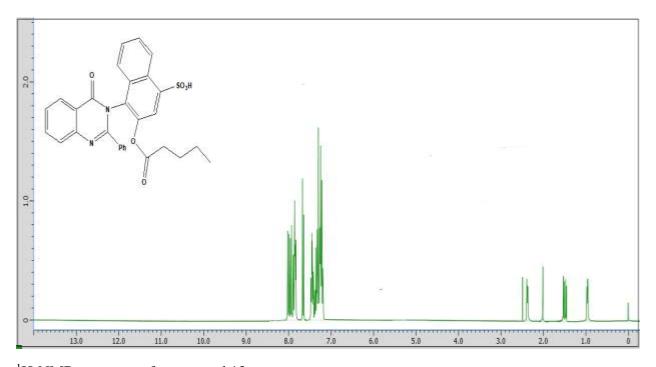
<sup>1</sup>H-NMR spectrum of compound 10.



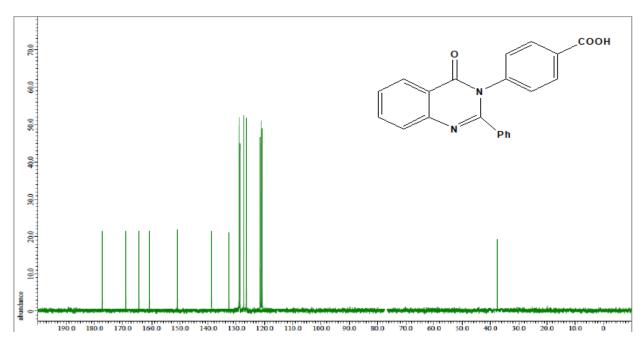
<sup>1</sup>H-NMR spectrum of compound 11.



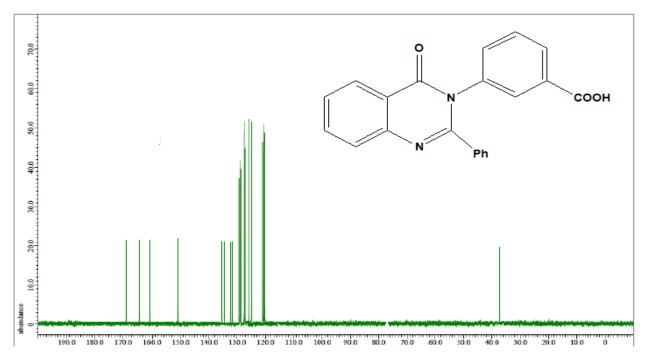
<sup>1</sup>H-NMR spectrum of compound 12.



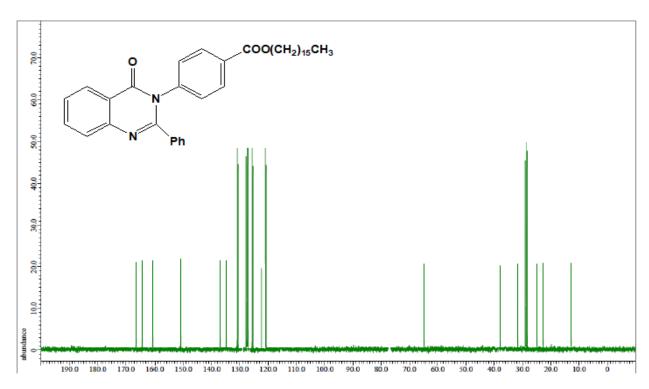
<sup>1</sup>H-NMR spectrum of compound 13.



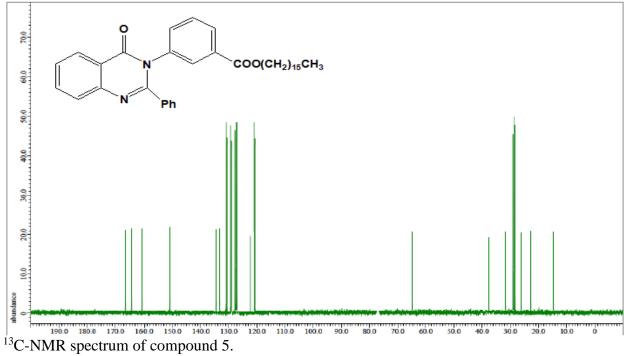
<sup>13</sup>C-NMR spectrum of compound 2.

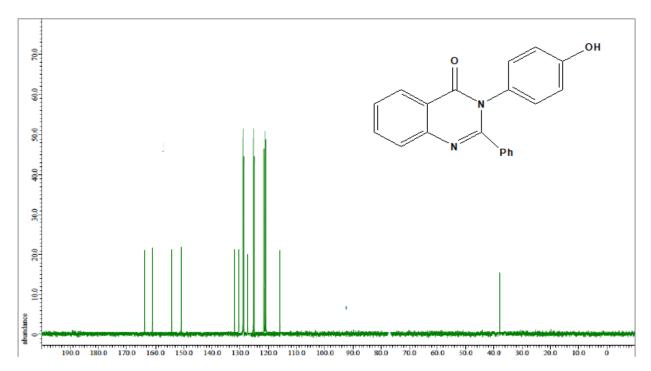


<sup>13</sup>C-NMR spectrum of compound 3.

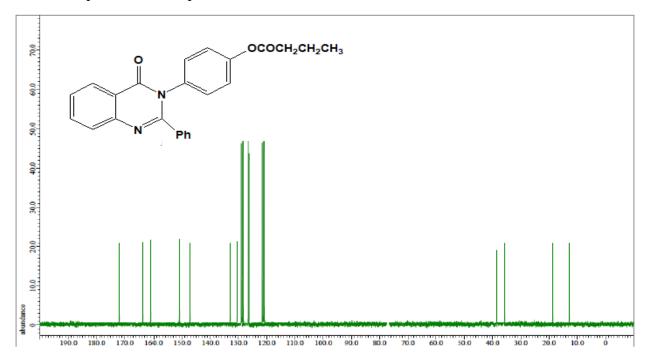


 $^{13}\text{C-NMR}$  spectrum of compound 4.

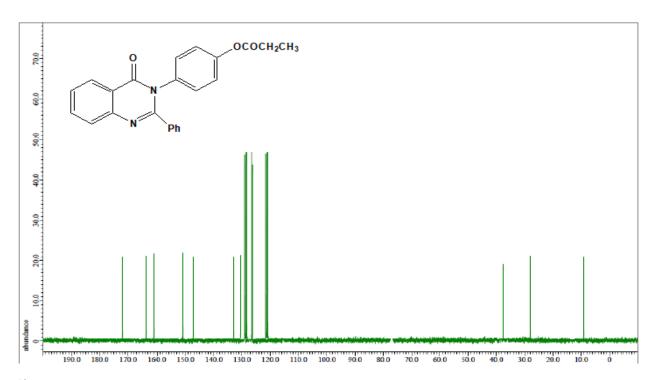




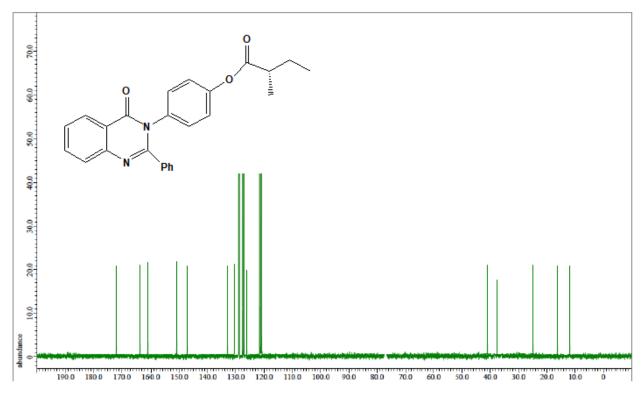
 $^{13}\text{C-NMR}$  spectrum of compound 6.



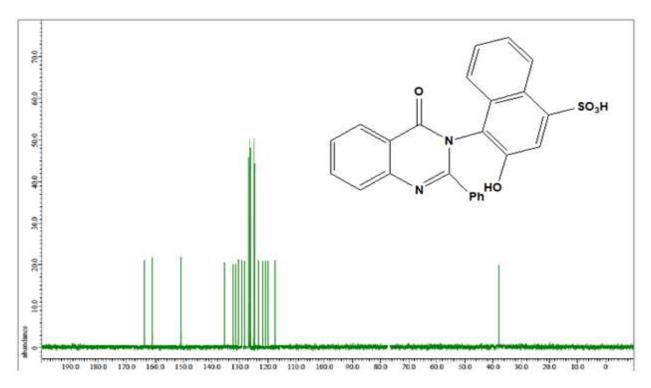
 $^{13}\text{C-NMR}$  spectrum of compound 7.



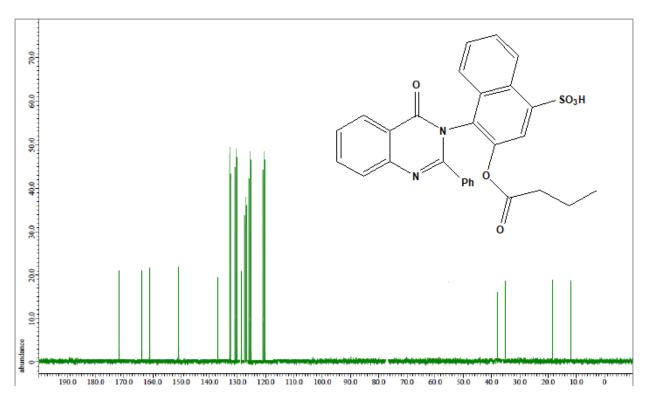
 $^{13}\mbox{C-NMR}$  spectrum of compound 8.



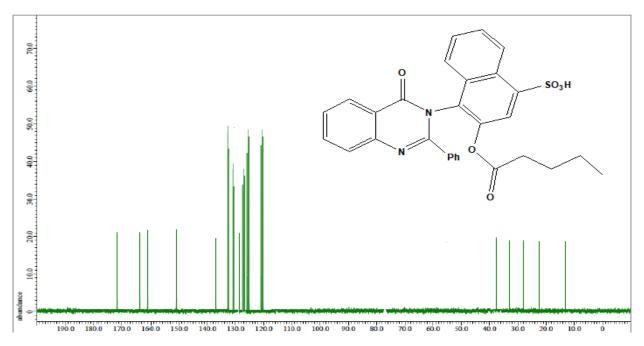
<sup>13</sup>C-NMR spectrum of compound 10.



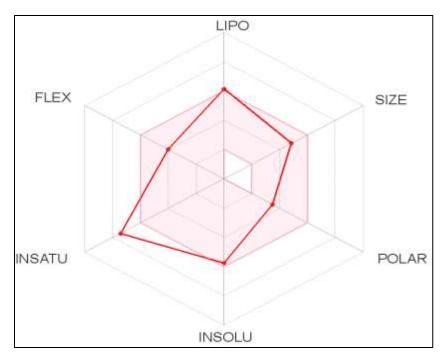
<sup>13</sup>C-NMR spectrum of compound 11.



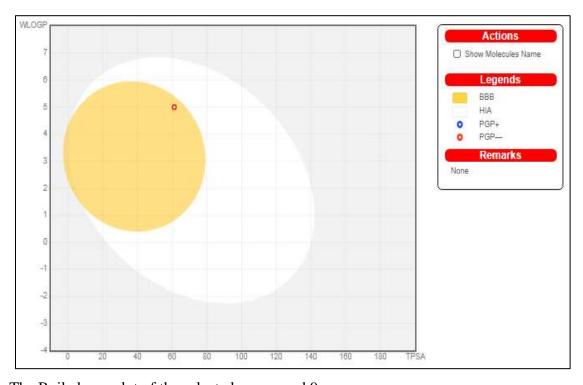
<sup>13</sup>C-NMR spectrum of compound 12.



<sup>13</sup>C-NMR spectrum of compound 13.



The oral bioavailability radar of the molecule 9. The colored zone is the suitable physicochemical space for oral bioavailability.



The Boiled-egg plot of the selected compound 9