Design, Synthesis and Evaluation of A New Series of Thiazole-Based Anticancer Agents as Potent Akt Inhibitors

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Figure S1. IR Spectrum of compound A
Figure S2. $^1$H NMR Spectrum of compound A
Figure S3. $^{13}$C NMR Spectrum of compound A
Figure S4. $^1$H NMR (DEPT) Spectrum of compound A
Figure S5. IR Spectrum of compound 1
Figure S6. $^1$H NMR Spectrum of compound 1
Figure S7. $^{13}$C NMR Spectrum of compound 1
Figure S8. HRMS Spectrum of compound 1

Figure S9. IR Spectrum of compound 2
Figure S10. $^1$H NMR Spectrum of compound 2
Figure S11. $^{13}$C NMR Spectrum of compound 2.
Figure S12. HRMS Spectrum of compound 2

Figure S13. IR Spectrum of compound 3
Figure S14. $^1$H NMR Spectrum of compound 3
Figure S15. $^{13}C$ NMR Spectrum of compound 3
Figure S16. HRMS Spectrum of compound 3

Figure S17. IR Spectrum of compound 4
Figure S18. $^1\text{H}$ NMR Spectrum of compound 4
Figure S19. $^{13}$C NMR Spectrum of compound 4

B-4_17Feb2013-13:22:00
Archive directory: /august/home/vnmv1/vnmvsys/data
Sample directory: B-4_17Feb2013-13:22:00
File: CARBON

Pulse Sequence: z2pul
Solvent: DMSO
Temp. 23.0 °C / 296.1 K
Mercury-400MS "mercury400"

Relax. delay 1.000 sec
Pulse 45.0 degrees
Acq. time 1.199 sec
Width 35135.4 Hz
2000 repetitions
OBSERVE C13, 100.6241052 MHz
DECOUPLE H1, 400.1779559 MHz
Power 39 dB
continuously on
WALTZ-16 modulated
DATA PROCESSING
Line broadening 1.0 Hz
FT size 65536
Total time 1 hr. 16 min. 21 sec
Figure S20. HRMS Spectrum of compound 4

Figure S21. IR Spectrum of compound 5
Figure S22. $^1$H NMR Spectrum of compound 5
Figure S23: $^{13}$C NMR Spectrum of compound 5
Figure S24. HRMS Spectrum of compound 5

Figure S25. IR Spectrum of compound 6
Figure S26. $^1$H NMR Spectrum of compound 6
Figure S27. 13C NMR Spectrum of compound 6

- Solvent: DMSO
- Temp: 23.0°C / 296.1 K
- Fill: CARBON
- Mercury-400BB "mercury400"

- Relax. delay: 1.000 sec
- Pulse: 45.0 degrees
- Acq. time: 1.199 sec
- Width: 25125.6 Hz
- 5000 repetitions
- OBSERVE: CI3, 100.6243052 MHz
- DECOUPLE: H1, 400.177555 MHz
- Power: 59 dm
- Continuously on
- WALIZ-16 modulated

DATA PROCESSING
- Line broadening: 1.0 Hz
- FT size: 65536
- Total time: 1 hr, 16 min, 21 sec
Figure S28. $^{13}$C NMR (DEPT) Spectrum of compound 6
Figure S29. HRMS Spectrum of compound 6

Figure S30. IR Spectrum of compound 7
Figure S31. $^1$H NMR Spectrum of compound 7
Figure S2. $^{13}$C NMR Spectrum of compound 7
Figure S33. $^{13}$C NMR (DEPT) Spectrum of compound 7
Figure S34. HRMS Spectrum of compound 7

Figure S35. IR Spectrum of compound 8
Figure S36. $^1$H NMR Spectrum of compound 8
Figure S37. $^{13}$C NMR Spectrum of compound 8
Figure S38. HRMS Spectrum of compound 8

Figure S39. IR Spectrum of compound 9
Figure S40. $^1$H NMR Spectrum of compound 9
Figure S41. $^{13}$C NMR Spectrum of compound 9.
Figure S42. HRMS Spectrum of compound 9

Figure S43. IR Spectrum of compound 10
Figure S44. $^1$H NMR Spectrum of compound 10
Figure S45. $^{13}$C NMR Spectrum of compound 10
Figure S46. HRMS Spectrum of compound 10