Supplementary Information

Synthesis of Aryl anilinomaleimide based derivatives as glycogen synthase kinase-3β inhibitors with potential role as antidepressant agents

Mushtaq A Tantray\textsuperscript{a}, Imran Khan\textsuperscript{a}, Hinna Hamid\textsuperscript{a*}, Mohammad Sarwar Alam\textsuperscript{a}, Abhijeet Dhulap\textsuperscript{b}, Abul Kalam\textsuperscript{c}

\textsuperscript{a}Department of Chemistry, Faculty of Science, Jamia Hamdard (Hamdard University), New Delhi 110062, India.
\textsuperscript{b}CSIR- Unit for Research and Development of Information Products (URDIP), Pune 411038, India
\textsuperscript{c}Department of Pharmacology, Faculty of Pharmacy, Jamia Hamdard (Hamdard University), New Delhi 110062, India.

Correspondence to Dr. Hinna Hamid, Jamia Hamdard (Hamdard University) Hamdard Nagar, New Delhi 110062, Email ID. hhamid@jamiahamdard.ac.in. Phone: +91 11 26059688 (5559).

Submitted to: New Journal of Chemistry
Spectral characterization of representative compounds:

4-(2,5-dihydro-1-methyl-2,5-dioxo-4-phenyl-1H-pyrrolo-3-ylamino)-N-(4-fluorophenyl)benzamide (7c)

Proton NMR (7c)
C-13 NMR (7c)
ESI-MS (7c)
4-(4-(4-chlorophenyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-ylamino)-N-(4-chlorophenyl)benzamide (8h)

Proton NMR (8h)
C-13 NMR (8h)
ESI-MS (8h)
4-(2,5-dihydro-4-(4-methoxyphenyl)-2,5-dioxo-1H-pyrrol-3-ylamino)-N-(4-methoxyphenyl)benzamide

(8j)

Proton NMR (8j)
C-13 NMR (8j)
ESI-MS (8j)
4-(2,5-dihydro-4-(4-methoxyphenyl)-2,5-dioxo-1H-pyrrol-3-ylamino)-N-(4-chlorophenyl)benzamide

(8l)

Proton NMR (8l)
C-13 (8l)
ESI-MS (81)
4-(2,5-dihydro-4-(4-nitrophenyl)-2,5-dioxo-1H-pyrrol-3-ylamino)-N-phenylbenzamide (8m)

Proton NMR (8m)

avtar saifpu@yahoo.co.in
C-13 (8m)
ESI-MS (8m)
4-(2,5-dihydro-4-(4-nitrophenyl)-2,5-dioxo-1H-pyrrol-3-ylamino)-N-(4-methoxyphenyl)benzamide

(8n)

Proton NMR (8n)
C-13 (8n)
ESI-MS (8n)
4-(2,5-dihydro-2,5-dioxo-4-phenyl-1H-pyrrol-3-ylamino)-N-(4-methoxyphenyl)benzamide (8b)
C-13 (8b)
4-(2,5-dihydro-2,5-dioxo-4-phenyl-1H-pyrrol-3-ylamino)-N-(4-fluorophenyl)benzamide (8c)

Proton NMR (8c)
C-13 (8c)
ESI-MS (8c)
4-(2,5-dihydro-2,5-dioxo-4-phenyl-1H-pyrrol-3-ylamino)-N-(4-chlorophenyl)benzamide (8d)

Proton NMR (8d)
ESI-MS (8d)