

Design and Evaluation of Novel Biphenyl Sulfonamide Derivatives with Potent Histamine H₃ Receptor Inverse Agonist Activity

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Supplementary Information

Table S1: HPLC/MS Purity and Retention Times for Target Compounds

Cmpd	Molec. Formula	Exact Mass	LCMS Retention Time (minutes)	LCMS % Purity (at 254 nm)
4a	C ₂₁ H ₂₈ N ₂ O ₂ S	372.19	2.82	99.3
4b	C ₂₂ H ₃₀ N ₂ O ₂ S	386.20	2.94	99.0
4c	C ₂₃ H ₃₂ N ₂ O ₂ S	400.22	3.23	93.8
4d	C ₂₄ H ₃₂ N ₂ O ₂ S	412.22	3.33	99.7
4e	C₂₁H₂₈N₂O₂S	372.19	2.77	99.9
4f	C ₂₂ H ₃₀ N ₂ O ₂ S	386.20	1.81	100.0
4g	C ₂₃ H ₃₂ N ₂ O ₂ S	400.22	3.37	92.7
4h	C ₂₄ H ₃₂ N ₂ O ₂ S	412.22	3.33	100.0
4i	C ₁₉ H ₂₄ N ₂ O ₂ S	344.16	2.45	95.0
4j	C ₂₃ H ₃₂ N ₂ O ₃ S	416.21	1.50	99.6
4k	C₂₂H₃₀N₂O₃S	402.20	2.69	99.7
4l	C ₂₃ H ₃₀ N ₂ O ₂ S	398.20	1.88	100.0
4m	C ₂₃ H ₃₀ N ₂ O ₂ S	398.20	1.89	98.7
4n	C₂₄H₃₂N₂O₃S	428.21	1.58	94.9
4o	C ₂₅ H ₂₈ N ₂ O ₂ S	420.19	2.02	99.7
4p	C ₂₆ H ₃₀ N ₂ O ₂ S	434.20	2.06	100.0
4q	C ₂₅ H ₂₉ N ₃ O ₂ S	435.20	1.85	99.7
4r	C₂₃H₃₀N₂O₃S	414.20	2.84	99.9
4s	C ₂₅ H ₃₄ N ₂ O ₃ S	442.23	2.00	100.0
4t	C ₂₃ H ₃₀ N ₂ O ₄ S ₂	462.16	2.86	99.1
4u	C ₂₅ H ₃₄ N ₂ O ₃ S	442.23	1.26	95.2
4v	C ₂₇ H ₃₀ N ₂ O ₂ S	446.20	2.23	100.0
4w	C ₂₃ H ₃₀ N ₂ O ₃ S	414.20	2.54	99.4
4x	C ₂₅ H ₃₄ N ₂ O ₃ S	442.23	3.15	100.0