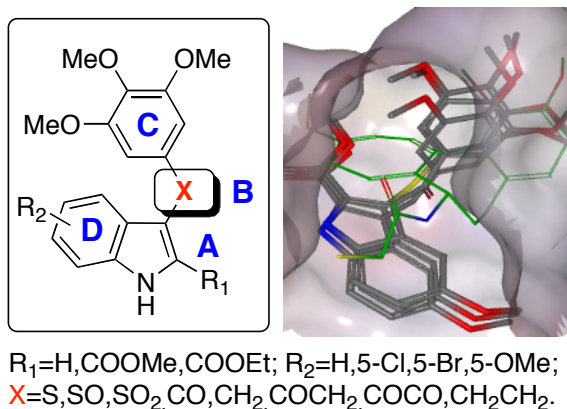


New Arylthioindoles and Related Bioisosteres at the Sulfur Bridging Group. 4. Synthesis, Tubulin Polymerization, Cell Growth Inhibition, and Molecular Modeling Studies

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TOC graphics



Contents

- **Figure 1S.** Effects of compounds **24**, **27-29**, **36**, **39** and **41** on murine macrophage J744.1 cell morphology.
- **Table 1S.** Elemental analyses of new derivatives **7**, **8**, **10**, **11**, **13**, **14**, **16**, **17**, **19-23**, **25-32**, **35**, **37-41**, and **43-56**.

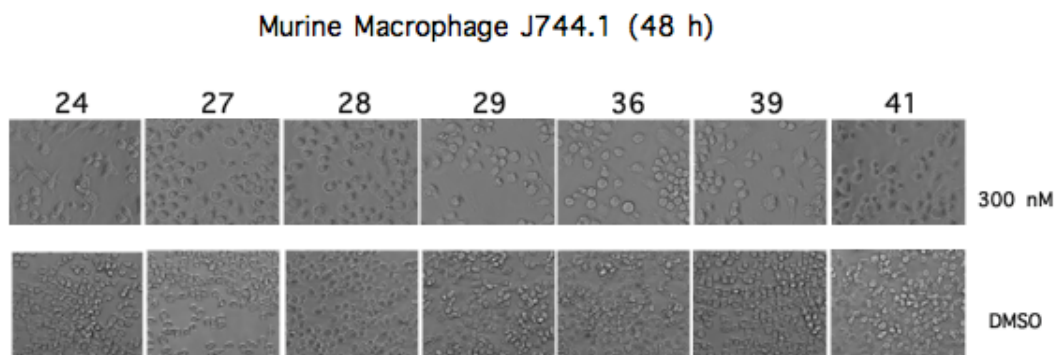


Figure 1S. Effects of compounds **24**, **27-29**, **36**, **39** and **41** on murine macrophage J744.1 cell morphology, as visualized by time-lapse microscopy (magnification 20 ×)

Table 1S. Elemental Analyses of New Derivatives **7, 8, 10, 11, 13, 14, 16, 17, 19-23, 25-32, 35, 37-41, and 43-56.**

Compd	Calcd	Found
7	C, 65.02; H, 5.19; N, 3.79.	C, 65.01; H, 5.18; N, 3.79.
8	C, 67.58; H, 5.95; N, 3.94.	C, 67.57; H, 5.95; N, 3.92.
10	C, 65.77; H, 5.52; N, 3.65.	C, 65.77; H, 5.53; N, 3.64.
11	C, 68.23; H, 6.28; N, 3.79.	C, 68.22; H, 6.25; N, 3.79.
13	C, 65.29; H, 4.67; Cl, 10.13; N, 4.06.	C, 65.30; H, 4.67; Cl, 10.14; N, 4.05.
14	C, 65.24; H, 5.48; Cl, 10.56; N, 4.23.	C, 65.24; H, 5.49; Cl, 10.58; N, 4.21.
16	C, 59.54; H, 4.50; Cl, 8.67; N, 3.47.	C, 59.53; H, 4.51; Cl, 8.66; N, 3.47.
17	C, 61.68; H, 5.18; Cl, 8.99; N, 3.60.	C, 61.69; H, 5.17; Cl, 8.98; N, 3.60.
19	C, 60.42; H, 4.83; Cl, 8.38; N, 3.36.	C, 60.44; H, 4.83; Cl, 8.37; N, 3.35.
20	C, 62.51; H, 5.50; Cl, 8.67; N, 3.47.	C, 62.51; H, 5.51; Cl, 8.66; N, 3.46.
21	C, 61.24; H, 5.14; Cl, 8.11; N, 3.25.	C, 61.25; H, 5.13; Cl, 8.11; N, 3.26.
22	C, 59.31; H, 4.53; Cl, 7.86; N, 3.15.	C, 59.31; H, 4.54; Cl, 7.85; N, 3.14.
23	C, 62.29; H, 5.80; Cl, 8.38; N, 3.36.	C, 62.30; H, 5.81; Cl, 8.38; N, 3.36.
25	C, 55.52; H, 4.14; Br, 20.28; N, 3.59.	C, 55.51; H, 4.13; Br, 20.28; N, 3.59.
26	C, 57.59; H, 4.84; Br, 21.04; N, 3.73.	C, 57.60; H, 4.85; Br, 21.04; N, 3.73.
27	C, 50.55; H, 4.02; Br, 17.50; N, 3.10.	C, 50.54; H, 4.01; Br, 17.50; N, 3.11.
28	C, 53.69; H, 4.06; Br, 17.65; N, 3.13.	C, 53.69; H, 4.07; Br, 17.64; N, 3.14.
29	C, 55.42; H, 4.65; Br, 18.22; N, 3.23.	C, 55.43; H, 4.64; Br, 18.22; N, 3.22.
30	C, 51.61; H, 4.33; Br, 16.97; N, 3.01; S, 6.87	C, 51.61; H, 4.32; Br, 16.97; N, 3.00; S, 6.87
31	C, 54.66; H, 4.37; Br, 17.12; N, 3.04.	C, 54.65; H, 4.36; Br, 17.12; N, 3.04.
32	C, 54.42; H, 7.79; Br, 17.04; N, 3.02.	C, 54.43; H, 7.79; Br, 17.05; N, 3.02.
35	C, 69.69; H, 6.47; N, 4.28.	C, 69.69; H, 6.48; N, 4.29.
37	C, 57.26; H, 5.05; N, 3.34; S, 7.63.	C, 57.27; H, 5.06; N, 3.34; S, 7.63.
38	C, 55.15; H, 4.86; N, 3.22; S, 7.35.	C, 55.14; H, 4.85; N, 3.22; S, 7.35.
39	C, 63.14; H, 5.30; N, 3.51.	C, 63.13; H, 5.31; N, 3.51.
40	C, 62.82; H, 5.78; N, 3.49.	C, 62.83; H, 5.79; N, 3.49.
41	C, 65.43; H, 6.01; N, 3.63.	C, 65.44; H, 6.02; N, 3.63.
43	C, 63.90; H, 5.61; N, 3.39.	C, 63.91; H, 5.62; N, 3.40.
44	C, 63.59; H, 6.07; N, 3.37.	C, 63.60; H, 6.06; N, 3.38.
45	C, 66.14; H, 6.31; N, 3.51.	C, 66.13; H, 6.32; N, 3.50.
46	C, 63.94; H, 6.63; N, 4.39.	C, 63.92; H, 6.61; N, 4.39.
47	C, 65.69; H, 7.25; N, 4.03.	C, 65.69; H, 7.24; N, 4.03.
48	C, 66.46; H, 7.53; N, 3.88.	C, 66.46; H, 7.53; N, 3.87.
49	C, 67.84; H, 8.02; N, 3.60.	C, 67.83; H, 8.01; N, 3.60.
50	C, 59.99; H, 6.29; N, 8.74.	C, 60.00; H, 6.30; N, 8.74.
51	C, 61.25; H, 5.75; N, 4.20.	C, 61.24; H, 5.74; N, 4.20.
52	C, 57.48; H, 5.43; N, 8.38.	C, 57.49; H, 5.42; N, 8.38.
53	C, 57.48; H, 5.43; N, 8.38.	C, 57.49; H, 5.44; N, 8.38.
54	C, 61.85; H, 5.88; N, 4.81.	C, 61.84; H, 5.86; N, 4.81.
55	C, 62.69; H, 7.41; N, 3.32.	C, 62.70; H, 7.42; N, 3.32.
56	C, 51.15; H, 5.21; Cl, 10.78; N, 8.52.	C, 51.16; H, 5.22; Cl, 10.78; N, 8.53.