

## **&#8220;Supporting Information.**

Synthesis, Flow Cytometric Evaluation and Identification of Highly Potent Dipyridamole Analogs as

Equilibrative Nucleoside Transporter 1 (ENT1) Inhibitors

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### **Elemental Analysis Data for Compounds 1-79**

Compound **1**. Calcd (C<sub>20</sub>H<sub>32</sub>N<sub>8</sub>O<sub>2</sub>): C 57.67, H 7.74, N 26.90; Found: C 56.89, H 7.83, N 26.90.  
Compound **2**. Calcd (C<sub>22</sub>H<sub>36</sub>N<sub>8</sub>O<sub>4</sub>): C 55.44, H 7.61, N 23.51; Found: C 55.01, H 7.46, N 23.40.  
Compound **3**. Calcd (C<sub>18</sub>H<sub>28</sub>N<sub>8</sub>O<sub>2</sub>): C 55.65, H 7.27, N 28.85; Found: C 55.57, H 7.21, N 28.58.  
Compound **4**. Calcd (C<sub>22</sub>H<sub>36</sub>N<sub>8</sub>O<sub>6</sub>): C 51.96, H 7.13, N 22.03; Found: C 51.33, H 7.25, N 21.91.  
Compound **5**. Calcd (C<sub>18</sub>H<sub>28</sub>N<sub>8</sub>O<sub>4</sub>): C 51.42, H 6.71, N 26.65; Found: C 50.69, H 6.65, N 26.10.  
Compound **6**. Calcd (C<sub>24</sub>H<sub>42</sub>N<sub>10</sub>O<sub>4</sub>): C 53.92, H 7.92, N 26.20; Found: C 53.71, H 7.94, N 25.91.  
Compound **7**. Calcd (C<sub>32</sub>H<sub>54</sub>N<sub>10</sub>O<sub>8</sub>): C 54.38, H 7.70, N 19.82; Found: C 54.04, H 7.99, N 19.61.  
Compound **8**. Calcd (C<sub>30</sub>H<sub>44</sub>N<sub>10</sub>O<sub>6</sub>): C 56.24, H 6.92, N 21.86; Found: C 55.90, H 6.94, N 21.56.  
Compound **9**. Calcd (C<sub>26</sub>H<sub>42</sub>N<sub>6</sub>O<sub>4</sub>): C 62.13, H 8.42, N 16.72; Found: C 61.58, H 8.36, N 16.63.  
Compound **10**. Calcd (C<sub>26</sub>H<sub>30</sub>N<sub>6</sub>O<sub>4</sub>): C 63.66, H 6.16, N 17.13; Found: C 63.30, H 6.22, N 16.90.  
Compound **11**. Calcd (C<sub>26</sub>H<sub>44</sub>N<sub>8</sub>O<sub>4</sub>): C 58.62, H 8.33, N 21.04; Found: C 58.50, H 8.23, N 21.02.  
Compound **12**. Calcd (C<sub>22</sub>H<sub>36</sub>N<sub>8</sub>O<sub>2</sub>): C 59.44, H 8.16, N 25.20; Found: C 59.26, H 8.25, N 25.35.  
Compound **13**. Calcd (C<sub>28</sub>H<sub>48</sub>N<sub>8</sub>O<sub>4</sub>): C 59.98, H 8.63, N 19.98; Found: C 59.81, H 8.56, N 19.97.  
Compound **14**. Calcd (C<sub>24</sub>H<sub>40</sub>N<sub>8</sub>O<sub>2</sub>): C 60.99, H 8.53, N 23.71; Found: C 61.03, H 8.56, N 23.81.  
Compound **15**. Calcd (C<sub>30</sub>H<sub>52</sub>N<sub>8</sub>O<sub>4</sub>): C 61.20, H 8.90, N 19.03; Found: C 60.73, H 8.84, N 18.87.  
Compound **16**. Calcd (C<sub>26</sub>H<sub>44</sub>N<sub>8</sub>O<sub>2</sub>): C 62.37, H 8.86, N 22.38; Found: C 62.29, H 8.85, N 22.38.  
Compound **17**. Calcd (C<sub>28</sub>H<sub>44</sub>N<sub>8</sub>O<sub>4</sub>): C 60.41, H 7.97, N 20.13; Found: C 60.44, H 8.09, N 19.96.  
Compound **18**. Calcd (C<sub>24</sub>H<sub>36</sub>N<sub>8</sub>O<sub>2</sub>): C 61.52, H 7.74, N 23.91; Found: C 61.73, H 7.80, N 23.79.  
Compound **19**. Calcd (C<sub>34</sub>H<sub>52</sub>N<sub>8</sub>O<sub>4</sub>): C 64.12, H 8.23, N 17.60; Found: C 63.58, H 8.19, N 17.59.  
Compound **20**. Calcd (C<sub>30</sub>H<sub>44</sub>N<sub>8</sub>O<sub>2</sub>): C 65.67, H 8.08, N 20.42; Found: C 65.97, H 8.07, N 20.56.  
Compound **21**. Calcd (C<sub>18</sub>H<sub>32</sub>N<sub>8</sub>O<sub>4</sub>): C 50.93, H 7.60, N 26.40; Found: C 50.91, H 7.60, N 26.50.  
Compound **22**. Calcd (C<sub>14</sub>H<sub>24</sub>N<sub>8</sub>O<sub>2</sub>): C 49.99, H 7.19, N 33.31; Found: C 50.20, H 7.13, N 33.21.  
Compound **23**. Calcd (C<sub>22</sub>H<sub>40</sub>N<sub>8</sub>O<sub>4</sub>): C 54.98, H 8.39, N 23.32; Found: C 54.77, H 8.40, N 23.28.  
Compound **24**. Calcd (C<sub>18</sub>H<sub>32</sub>N<sub>8</sub>O<sub>2</sub>): C 55.08, H 8.22, N 28.55; Found: C 55.21, H 8.40, N 28.73.  
Compound **25**. Calcd (C<sub>26</sub>H<sub>48</sub>N<sub>8</sub>O<sub>4</sub>): C 58.18, H 9.01, N 20.88; Found: C 57.99, H 9.10, N 21.00.  
Compound **26**. Calcd (C<sub>22</sub>H<sub>40</sub>N<sub>8</sub>O<sub>2</sub>): C 58.90, H 8.99, N 24.98; Found: C 58.92, H 9.05, N 25.07.  
Compound **27**. Calcd (C<sub>30</sub>H<sub>56</sub>N<sub>8</sub>O<sub>4</sub>): C 60.78, H 9.52, N 18.90; Found: C 60.43, H 9.43, N 18.80.  
Compound **28**. Calcd (C<sub>26</sub>H<sub>48</sub>N<sub>8</sub>O<sub>2</sub>): C 61.87, H 9.59, N 22.20; Found: C 61.01, H 9.46, N 21.51.  
Compound **29**. Calcd (C<sub>30</sub>H<sub>56</sub>N<sub>8</sub>O<sub>4</sub>): C 60.78, H 9.52, N 18.90; Found: C 60.48, H 9.42, N 18.93.  
Compound **30**. Calcd (C<sub>26</sub>H<sub>48</sub>N<sub>8</sub>O<sub>2</sub>): C 61.87, H 9.59, N 22.20; Found: C 60.92, H 9.45, N 21.70.  
Compound **31**. Calcd (C<sub>34</sub>H<sub>64</sub>N<sub>8</sub>O<sub>4</sub>): C 62.93, H 9.94, N 17.27; Found: C 62.23, H 9.91, N 17.00.  
Compound **32**. Calcd (C<sub>30</sub>H<sub>56</sub>N<sub>8</sub>O<sub>2</sub>): C 64.25, H 10.06, N 19.98; Found: C 63.89, H 10.04, N 19.60.  
Compound **33**. Calcd (C<sub>34</sub>H<sub>64</sub>N<sub>8</sub>O<sub>4</sub>): C 62.93, H 9.94, N 17.27; Found: C 62.85, H 9.94, N 17.15.  
Compound **34**. Calcd (C<sub>30</sub>H<sub>56</sub>N<sub>8</sub>O<sub>2</sub>): C 64.25, H 10.06, N 19.98; Found: C 64.02, H 10.06, N 19.86.  
Compound **35**. Calcd (C<sub>26</sub>H<sub>48</sub>N<sub>8</sub>O<sub>8</sub>): C 51.99, H 8.05, N 18.65; Found: C 52.10, H 8.01, N 18.58.

Compound **36**. Calcd (C<sub>22</sub>H<sub>40</sub>N<sub>8</sub>O<sub>6</sub>): C 51.55, H 7.87, N 21.86; Found: C 51.33, H 7.73, N 21.78.  
Compound **37**. Calcd (C<sub>42</sub>H<sub>48</sub>N<sub>8</sub>O<sub>4</sub>): C 69.21, H 6.64, N 15.37; Found: C 69.18, H 6.59, N 15.35.  
Compound **38**. Calcd (C<sub>38</sub>H<sub>40</sub>N<sub>8</sub>O<sub>2</sub>): C 71.23, H 6.29, N 17.49; Found: C 71.02, H 6.29, N 17.47.  
Compound **39**. Calcd (C<sub>14</sub>H<sub>24</sub>N<sub>8</sub>O<sub>4</sub>): C 45.64, H 6.57, N 30.42; Found: C 45.29, H 6.73, N 29.58.  
Compound **40**. Calcd (C<sub>16</sub>H<sub>28</sub>N<sub>8</sub>O<sub>4</sub>): C 48.47, H 7.12, N 28.26; Found: C 48.58, H 7.20, N 28.11.  
Compound **41**. Calcd (C<sub>12</sub>H<sub>20</sub>N<sub>8</sub>O<sub>2</sub>): C 46.74, H 6.54, N 36.34; Found: C 46.69, H 6.48, N 36.35.  
Compound **42**. Calcd (C<sub>18</sub>H<sub>32</sub>N<sub>8</sub>O<sub>4</sub>): C 50.93, H 7.60, N 26.40; Found: C 50.93, H 7.72, N 26.52.  
Compound **43**. Calcd (C<sub>14</sub>H<sub>24</sub>N<sub>8</sub>O<sub>2</sub>): C 49.99, H 7.19, N 33.31; Found: C 50.19, H 7.30, N 33.06.  
Compound **44**. Calcd (C<sub>20</sub>H<sub>36</sub>N<sub>8</sub>O<sub>4</sub>): C 53.08, H 8.02, N 24.76; Found: C 53.16, H 8.13, N 24.56.  
Compound **45**. Calcd (C<sub>16</sub>H<sub>28</sub>N<sub>8</sub>O<sub>2</sub>): C 52.73, H 7.74, N 30.75; Found: C 52.52, H 7.79, N 30.53.  
Compound **46**. Calcd (C<sub>20</sub>H<sub>36</sub>N<sub>8</sub>O<sub>4</sub>): C 53.08, H 8.02, N 24.76; Found: C 53.34, H 8.03, N 24.90.  
Compound **47**. Calcd (C<sub>16</sub>H<sub>28</sub>N<sub>8</sub>O<sub>2</sub>): C 52.73, H 7.74, N 30.75; Found: C 52.57, H 7.53, N 30.57.  
Compound **48**. Calcd (C<sub>22</sub>H<sub>40</sub>N<sub>8</sub>O<sub>4</sub>): C 54.98, H 8.39, N 23.32; Found: C 54.40, H 8.36, N 22.72.  
Compound **49**. Calcd (C<sub>18</sub>H<sub>32</sub>N<sub>8</sub>O<sub>2</sub>): C 55.08, H 8.22, N 28.55; Found: C 54.86, H 8.17, N 28.30.  
Compound **50**. Calcd (C<sub>22</sub>H<sub>40</sub>N<sub>8</sub>O<sub>4</sub>): C 54.98, H 8.39, N 23.32; Found: C 54.90, H 8.50, N 23.38.  
Compound **51**. Calcd (C<sub>18</sub>H<sub>32</sub>N<sub>8</sub>O<sub>2</sub>): C 55.08, H 8.22, N 28.55; Found: C 54.46, H 8.15, N 28.22.  
Compound **52**. Calcd (C<sub>22</sub>H<sub>40</sub>N<sub>8</sub>O<sub>4</sub>): C 54.98, H 8.39, N 23.32; Found: C 54.61, H 8.40, N 23.18.  
Compound **53**. Calcd (C<sub>18</sub>H<sub>32</sub>N<sub>8</sub>O<sub>2</sub>): C 55.08, H 8.22, N 28.55; Found: C 54.86, H 8.27, N 28.36.  
Compound **54**. Calcd (C<sub>24</sub>H<sub>44</sub>N<sub>8</sub>O<sub>4</sub>): C 56.67, H 8.72, N 22.03; Found: C 56.61, H 8.75, N 22.10.  
Compound **55**. Calcd (C<sub>20</sub>H<sub>36</sub>N<sub>8</sub>O<sub>2</sub>): C 57.12, H 8.63, N 26.64; Found: C 55.92, H 8.51, N 25.95.  
Compound **56**. Calcd (C<sub>24</sub>H<sub>44</sub>N<sub>8</sub>O<sub>4</sub>): C 56.67, H 8.72, N 22.03; Found: C 56.03, H 8.73, N 21.91.  
Compound **57**. Calcd (C<sub>20</sub>H<sub>36</sub>N<sub>8</sub>O<sub>2</sub>): C 57.12, H 8.63, N 26.64; Found: C 54.86, H 8.87, N 25.70.  
Compound **58**. Calcd (C<sub>24</sub>H<sub>44</sub>N<sub>8</sub>O<sub>4</sub>): C 56.67, H 8.72, N 22.03; Found: C 56.68, H 8.76, N 22.03.  
Compound **59**. Calcd (C<sub>20</sub>H<sub>36</sub>N<sub>8</sub>O<sub>2</sub>): C 57.12, H 8.63, N 26.64; Found: C 56.02, H 8.67, N 25.62.  
Compound **60**. Calcd (C<sub>20</sub>H<sub>32</sub>N<sub>8</sub>O<sub>4</sub>): C 53.56, H 7.19, N 24.98; Found: C 53.14, H 7.08, N 24.05.  
Compound **61**. Calcd (C<sub>16</sub>H<sub>24</sub>N<sub>8</sub>O<sub>2</sub>): C 53.32, H 6.71, N 31.09; Found: C 52.93, H 6.80, N 30.59.  
Compound **62**. Calcd (C<sub>22</sub>H<sub>36</sub>N<sub>8</sub>O<sub>4</sub>): C 55.45, H 7.61, N 23.51; Found: C 55.20, H 7.86, N 23.35.  
Compound **63**. Calcd (C<sub>18</sub>H<sub>28</sub>N<sub>8</sub>O<sub>2</sub>): C 55.65, H 7.27, N 28.84; Found: C 55.01, H 7.44, N 27.93.  
Compound **64**. Calcd (C<sub>24</sub>H<sub>40</sub>N<sub>8</sub>O<sub>4</sub>): C 57.12, H 7.99, N 22.20; Found: C 57.04, H 8.06, N 22.35.  
Compound **65**. Calcd (C<sub>20</sub>H<sub>32</sub>N<sub>8</sub>O<sub>2</sub>): C 57.67, H 7.74, N 26.90; Found: C 56.58, H 7.79, N 26.47.  
Compound **66**. Calcd (C<sub>26</sub>H<sub>44</sub>N<sub>8</sub>O<sub>4</sub>): C 58.62, H 8.33, N 21.04; Found: C 58.52, H 8.47, N 21.03.  
Compound **67**. Calcd (C<sub>22</sub>H<sub>36</sub>N<sub>8</sub>O<sub>2</sub>): C 59.44, H 8.16, N 25.20; Found: C 59.52, H 8.23, N 25.17.  
Compound **68**. Calcd (C<sub>26</sub>H<sub>32</sub>N<sub>8</sub>O<sub>4</sub>): C 59.99, H 6.20, N 21.52; Found: C 59.60, H 6.13, N 21.35.  
Compound **69**. Calcd (C<sub>22</sub>H<sub>24</sub>N<sub>8</sub>O<sub>2</sub>): C 61.10, H 5.59, N 25.91; Found: C 60.31, H 5.69, N 25.23.  
Compound **70**. Calcd (C<sub>28</sub>H<sub>36</sub>N<sub>8</sub>O<sub>4</sub>): C 61.30, H 6.61, N 20.42; Found: C 61.13, H 6.65, N 20.34.  
Compound **71**. Calcd (C<sub>24</sub>H<sub>28</sub>N<sub>8</sub>O<sub>2</sub>): C 62.59, H 6.13, N 24.33; Found: C 62.51, H 6.22, N 24.27.  
Compound **73**. Calcd (C<sub>24</sub>H<sub>36</sub>N<sub>8</sub>O<sub>2</sub>): C 61.52, H 7.74, N 23.91; Found: C 61.64, H 7.60, N 24.06.  
Compound **74**. Calcd (C<sub>28</sub>H<sub>40</sub>N<sub>8</sub>O<sub>8</sub>): C 54.54, H 6.54, N 18.17; Found: C 54.60, H 6.70, N 18.24.  
Compound **75**. Calcd (C<sub>32</sub>H<sub>48</sub>N<sub>8</sub>O<sub>8</sub>): C 57.13, H 7.19, N 16.66; Found: C 57.32, H 7.34, N 16.78.  
Compound **76**. Calcd (C<sub>28</sub>H<sub>48</sub>N<sub>8</sub>O<sub>4</sub>): C 59.98, H 8.63, N 19.98; Found: C 59.96, H 8.48, N 20.03.  
Compound **77**. Calcd (C<sub>32</sub>H<sub>56</sub>N<sub>8</sub>O<sub>4</sub>): C 62.31, H 9.15, N 18.17; Found: C 62.33, H 9.17, N 18.14.  
Compound **78**. Calcd (C<sub>36</sub>H<sub>64</sub>N<sub>8</sub>O<sub>4</sub>): C 64.25, H 9.59, N 16.65; Found: C 64.43, H 9.62, N 16.73.  
Compound **79**. Calcd (C<sub>30</sub>H<sub>52</sub>N<sub>8</sub>O<sub>4</sub>): C 61.20, H 8.90, N 19.03; Found: C 60.98, H 9.04, N 18.88