Table S1. Inhibitory activity ($K_i$ values) of the studied phosphinic and phosphonic acid based compounds against purified recombinant *Helicobacter pylori* urease.

<table>
<thead>
<tr>
<th>Inhibitor 1</th>
<th>$K_i$ values of compounds</th>
<th>Lineweaver-Burk plot for inhibition of <em>H. pylori</em> urease by studied phosphinic and phosphonic acid based compounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhibitor 1</td>
<td>$K_i = 38.3 \pm 1.1 \ \mu$M</td>
<td><img src="image1" alt="Inhibitor 1 Lineweaver-Burk plot" /></td>
</tr>
<tr>
<td>Inhibitor 2</td>
<td>$K_i = 61.6 \pm 3.5 \ \mu$M</td>
<td><img src="image2" alt="Inhibitor 2 Lineweaver-Burk plot" /></td>
</tr>
</tbody>
</table>
Inhibitor 3

\[ K_i = 9.27 \pm 0.35 \, \mu M \]

\[ V(\Delta A_{\text{min}} - 1) \]

\[ \text{[urea (mM)]}^{-1} \]

Inhibitor 4

\[ K_i = 1.032 \pm 0.068 \, \mu M \]

\[ V(\Delta A_{\text{min}} - 1) \]

\[ \text{[urea (mM)]}^{-1} \]
Inhibitor 5

\( K_i = 74.3 \pm 4.7 \text{ µM} \)

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Inhibitor 6

\( K_i = 61.0 \pm 9.2 \text{ µM} \)
Inhibitor 7

$K_i = 20.9 \pm 2.0 \, \mu\text{M}$

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Inhibitor 8

$K_i = 29.9 \pm 2.0 \, \mu\text{M}$

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Inhibitor 9

$K_i = 22.1 \pm 2.1 \, \mu\text{M}$
Inhibitor 10

\[ K_i = 440 \pm 70 \mu M \]

Inhibitor 11

\[ K_i = 27.0 \pm 2.1 \mu M \]
Inhibitor 11

$K_i = 43.1 \pm 3.6 \mu M$

Inhibitor 12

$K_i = 43.1 \pm 3.6 \mu M$
Inhibitor 13

$K_i = 0.294 \pm 0.013 \, \mu M$

Inhibitor 14

$K_i = 878 \pm 25 \, \mu M$
Inhibitor 18

\[ K_i = 44.4 \pm 2.5 \, \mu M \]

[Graph showing data for Inhibitor 18]

Inhibitor 19

\[ K_i = 36.4 \pm 4.9 \, \mu M \]

[Graph showing data for Inhibitor 19]
Inhibitor 21

\[ K_i = 26.1 \pm 1.8 \, \text{µM} \]

Inhibitor 23

\[ K_i = 50.7 \pm 4.8 \, \text{µM} \]
Inhibitor 24

$K_I = 23.2 \pm 1.5 \ \mu M$