

**TABLE S1. Cytotoxicity and selectivity index (SI) of selenium-compounds against different host cell lines and promastigote forms of *Leishmania amazonensis*.**

Compound	IC50 <i>L. amazonensis</i> ( $\mu$ M)	CC50 NIH/3T3 ( $\mu$ M)	Selectivity Index (SI)	CC50 J774 ( $\mu$ M)	Selectivity Index (SI)	CC50 peritoneal cells ( $\mu$ M)	Selectivity Index (SI)
<b>101</b>	30.46 $\pm$ 1.17	> 200	6.57	> 200	6.57	> 200	6.57
<b>102</b>	15.15 $\pm$ 1.12	> 200	13.20	> 200	13.20	> 200	13.20
<b>103</b>	15.48 $\pm$ 1.13	> 200	12.92	> 200	12.92	> 200	12.92
<b>104</b>	16.17 $\pm$ 1.19	> 200	12.37	126.7 $\pm$ 1.04	7.84	> 200	12.37
<b>105</b>	12.17 $\pm$ 1.12	87.85 $\pm$ 1.09	7.22	60.16 $\pm$ 1.04	4.94	> 200	16.43
<b>106</b>	3.96 $\pm$ 1.09	> 200	50.53	> 200	50.53	> 200	50.53
<b>107</b>	27.37 $\pm$ 1.24	> 200	7.31	> 200	7.31	> 200	7.31
<b>108</b>	4.23 $\pm$ 2.00	> 200	47.31	> 200	47.31	> 200	47.31
<b>111</b>	17.55 $\pm$ 1.18	> 200	11.40	> 200	11.40	> 200	11.40
<b>113</b>	40.98 $\pm$ 1.31	> 200	4.88	> 200	4.88	> 200	4.88
ANFB	9.407 $\pm$ 1.13	19.26 $\pm$ 1.01	2.05	27.34 $\pm$ 0.92	2.91	25.15 $\pm$ 0.82	2.67

The antileishmanial activity of selenium-compounds was evaluated against promastigote forms of *L. amazonensis* after 48 hours. The cytotoxicity was performed in NIH/3T3 cells, J774A.1 cells and peritoneal macrophages. Selectivity index (SI) was calculated as CC50/IC50 values for Abbreviations: CC50 = half-maximal cytotoxic concentration; IC50 = half-maximal inhibitory concentration; SD = standard deviation; SI = selectivity index. ANFB = amphotericin B used as reference drug for *L. amazonensis*.

**TABLE S2. Cytotoxicity and selectivity index (SI) of selenium-compounds against different host cell lines and intracellular amastigotes forms of *Leishmania amazonensis*.**

Compound	IC50 <i>L. amazonensis</i> ( $\mu$ M)	CC50 NIH/3T3 ( $\mu$ M)	Selectivity Index (SI)	CC50 J774 ( $\mu$ M)	Selectivity Index (SI)	CC50 peritoneal cells ( $\mu$ M)	Selectivity Index (SI)
<b>101</b>	> 50	> 200	ind	> 200	ind	> 200	ind
<b>102</b>	> 50	> 200	ind	> 200	ind	> 200	ind
<b>103</b>	> 50	> 200	ind	> 200	ind	> 200	ind
<b>104</b>	> 50	> 200	ind	126.7 $\pm$ 1.04	ind	> 200	ind
<b>105</b>	> 50	87.85 $\pm$ 1.09	ind	60.16 $\pm$ 1.04	ind	> 200	ind
<b>106</b>	> 50	> 200	ind	> 200	ind	> 200	ind
<b>107</b>	18.31 $\pm$ 1.50	> 200	10.92	> 200	10.92	> 200	10.92
<b>108</b>	> 50	> 200	ind	> 200	ind	> 200	ind
<b>111</b>	> 50	> 200	ind	> 200	ind	> 200	ind
<b>113</b>	15.93 $\pm$ 1.69	> 200	12.55	> 200	12.55	> 200	12.55
ANFB	0.97 $\pm$ 1.14	19.26 $\pm$ 1.01	25.92	27.34 $\pm$ 0.92	28.19	25.15 $\pm$ 0.82	25.93

The antileishmanial activity of selenium-compounds was evaluated against intracellular amastigotes forms of *L. amazonensis* after 24 hours. The cytotoxicity was performed in NIH/3T3 cells, J774A.1 cells and peritoneal macrophages. Selectivity index (SI) was calculated as CC50/IC50 values for Abbreviations: CC50 = half-maximal cytotoxic concentration; IC50 = half-maximal inhibitory concentration; SD = standard deviation; SI = selectivity index. ANFB = amphotericin B used as reference drug for *L. amazonensis*. Ind = means indetermined results.