



**Figure S1.** Antiviral activity comparison of HCI and PR assay.  $Z'$  (A), S/B (B) and CV% (C) of HCI (used for HTS) and plate-reader (PR = whole-well fluorescence – used for hit confirmation) antiviral assays. The average  $Z'$  factors are 0.90 in HCI and 0.92 in PR; signal-to-background ratio are 8960 in HCI and 362 in PR; percentage of coefficient of variation of infected control are 3.4% in HCI and 2.7% in PR. The violin plot graphs show data from 13 plates. (D) Anti-RABV activity of ribavirin in BHK-21 cells in HCI and PR assay. Serial dilutions of ribavirin were added together with mCherry-RABV (MOI 0.019 in HCI assay, MOI 0.01 in PR assay) to BHK-21 cells. Antiviral activity and cell viability were determined by HCI analysis for 384-well assay, or by using a standard plate reader (PR) for 96-well assay. Fitting the dose-response curves results in the calculation of  $EC_{50}$  of ribavirin of 9.5  $\mu\text{M}$  and 3.9  $\mu\text{M}$ , and  $CC_{50}$  of 30  $\mu\text{M}$  and 28  $\mu\text{M}$ , respectively. Averages and standard deviations of at least 3 independent experiments are presented.

**Table S1.** Effect of selected molecules on *in vitro* RABV replication.

Compounds	Screening antiviral activity at 10 $\mu\text{M}$		Dose response confirmation		
	% infection	% viability	$EC_{50}$ ( $\mu\text{M}$ ) <sup>a</sup>	$CC_{50}$ ( $\mu\text{M}$ ) <sup>b</sup>	SI <sup>c</sup>
Cyproheptadine	21	78	5.6 $\pm$ 0.95	39 $\pm$ 13	6.9
Levamlodipine	5.3	60	7.9 $\pm$ 3.1	24 $\pm$ 2.0	3.1
Dasatinib	7.0	65	2.0 $\pm$ 2.6	5.8 $\pm$ 4.8	2.9
Salinomycin	20	63	<0.080	3.0 $\pm$ 0.8	>38
Ribavirin <sup>d</sup>	40	92	5.1 $\pm$ 1.6	36 $\pm$ 18	7.0

a. Concentration at which present virus infection was reduced by 50%.

b. Concentration at which cell viability was reduced by 50%.

c. Selectivity index (ratio of  $CC_{50}$  to  $EC_{50}$ ).

d. Included as reference compound.