**Supplementary Material**

Table 1 Determination of virulence of RV-SA11 strain (n=3)

| Concentration of virus | 0   | 10^{-10} | 10^{-9} | 10^{-8} | 10^{-7} | 10^{-6} | 10^{-5} | 10^{-4} | 10^{-3} | 10^{-2} | 10^{-1} |
|------------------------|-----|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Average absorbance     | 1.37| 1.22     | 1.18    | 1.32    | 1.13    | 1.05    | 0.82    | 0.72    | 0.61    | 0.57    | 0.45    |
| Cell viability         | 1   | 0.81     | 0.78    | 0.88    | 0.75    | 0.70    | 0.55    | 0.48    | 0.41    | 0.38    | 0.30    |
| Cytopathic rate        | 0   | 0.19     | 0.22    | 0.12    | 0.25    | 0.30    | 0.45    | 0.52    | 0.59    | 0.62    | 0.70    |

Table 2 The chemical constituents of SBP-containing serum identified by UPLC-Q-Orbitrap HRMS

| Number | Name                                                                 | Formula   | Molecular Weight | RT (min) |
|--------|----------------------------------------------------------------------|-----------|------------------|----------|
| 1      | N1-(1,3,5-Trimethyl-1H-pyrazol-4-yl)-2-cyano-3-(dimethylamino)acrylamide | C12 H17 N5 O | 247.14212        | 1.318    |
| 2      | Isoliquiritigenin                                                    | C15 H12 O4 | 256.07323        | 12.036   |
| 3      | 2-Methoxyestrone                                                    | C19 H24 O3 | 300.17024        | 17.915   |
| 4      | 6-O-Pentopyranosyl-1-O-[(2,6,6-trimethyl-1-cyclohexen-1-yl)carbonyl]-β- | C21 H34 O11 | 526.22263        | 18.218   |
| 5      | Oleanolic acid                                                       | C30 H48 O3 | 438.34975        | 19.468   |
| 6      | Monoolein                                                           | C21 H40 O4 | 356.29247        | 20.026   |
| 7      | 18-β-Glycyrrhetinic acid                                            | C30 H46 O4 | 470.3394         | 21.032   |
| 8      | 9(Z),11(E)-Conjugated Linoleic Acid                                  | C18 H32 O2 | 280.24           | 21.869   |
| 9      | Oleic acid                                                          | C18 H34 O2 | 282.25585        | 23.275   |
Table 3 The effects of drug-containing serum on the Cell viability of Caco-2 cells (%) (n=3)

| drug-containing serum% | SBP       | ribavirin  |
|------------------------|-----------|------------|
| 50                     | 65.29±9.51| 63.25±12.43|
| 40                     | 73.85±4.38| 72.48±5.28 |
| 30                     | 80.56±11.56| 79.21±9.84 |
| 20                     | 90.13±9.34| 90.43±9.11 |
| 10                     | 102.8±7.85| 103.32±6.58|
| 5                      | 99.74±7.89| 97.96±10.13|
| 2.5                    | 96.36±6.22| 96.3±5.25  |

Table 4 The inhibitory effects of drug-containing serum on the RV SA11 in Caco-2 cells (%) (n=3)

| drug-containing serum% | SBP       | ribavirin  |
|------------------------|-----------|------------|
| 40                     | 68.52±3.06| 82.36±7.85 |
| 30                     | 80.82±5.67| 91.53±4.31 |
| 20                     | 73.3±3.32 | 78.39±7.86 |
| 10                     | 63.85±3.62| 72.04±4.97 |
| 5                      | 48.34±4.56| 57.54±6.60 |
| 2.5                    | 34.37±2.74| 39.52±6.82 |

Table 5 The protein expressions of TLR4, MyD88 and NF-κB p65 (n=3)

| Group     | TLR4       | MyD88      | NF-κB p65  |
|-----------|------------|------------|------------|
| NC        | 0.0275±0.003| 0.019±0.005| 0.088±0.006|
| RV        | 0.738±0.041##| 0.652±0.024##| 0.655±0.038##|
| ribavirin | 0.405±0.030**| 0.421±0.034**| 0.296±0.012**|
| SBP       | 0.452±0.013**| 0.480±0.020**| 0.261±0.016**|

## P < 0.01 vs. NC group; *P < 0.05, ** P < 0.01 vs. RV group.
Table 6  The mRNA expressions of TLR4, MyD88, and NF-κB p65 (n=3)

| Group | TLR4       | MyD88      | NF-κB P65   |
|-------|------------|------------|-------------|
| NC    | 1          | 1          | 1           |
| RV    | 3.678±0.665## | 4.015±0.25## | 2.534±0.096## |
| ribavirin | 1.785±0.191** | 1.816±0.131** | 1.556±0.076** |
| SBP   | 2.054±0.135** | 1.510±0.144** | 1.438±0.108** |

## P < 0.01 vs. NC group; *P < 0.05, ** P < 0.01 vs. RV group.

Table 7  The expression of cytokines (pg/ml) (n=3)

| Group | IL-1β     | IL-6      | TNF-α      | IFN-β     |
|-------|-----------|-----------|------------|-----------|
| NC    | 125.07±8.42 | 37.71±3.90 | 250.09±13.36 | 26.08±3.64 |
| RV    | 228.43±14.70## | 83.88±7.91## | 446.17±12.22## | 43.87±3.73## |
| ribavirin | 166.06±8.32** | 67.35±7.18* | 292.34±11.91** | 52.74±4.60* |
| SBP   | 172.89±8.59** | 53.47±9.15** | 308.38±16.63** | 61.61±3.11** |

## P < 0.01 vs. NC group; *P < 0.05, ** P < 0.01 vs. RV group.