

**Supplementary Table 1.** ATP bioluminescence values (normalized to control) and z-factor derived from the ATP values in HMVP2 cells treated with the individual natural compounds listed at the doses of 5, 10 or 20 µM and for 12, 24 or 48 hours. Column 1 on the left indicates the order of the natural compounds used to sort ATP levels in Figure 1. Natural compounds are listed in alphabetical order.

|     |                                 | 5 µM treatment dose |          |          |          | 10 µM treatment dose |          |          |          | 20 µM treatment dose |          |          |          |
|-----|---------------------------------|---------------------|----------|----------|----------|----------------------|----------|----------|----------|----------------------|----------|----------|----------|
|     |                                 | 12 hours            |          | 24 hours |          | 48 hours             |          | 12 hours |          | 24 hours             |          | 48 hours |          |
|     |                                 | ATP                 | z-factor | ATP      | z-factor | ATP                  | z-factor | ATP      | z-factor | ATP                  | z-factor | ATP      | z-factor |
| 80  | (-)Epigallocatechin gallate     | 0.69                | -1.68    | 0.69     | -1.99    | 0.66                 | -1.22    | 0.44     | -0.14    | 0.46                 | -1.28    | 0.49     | -1.58    |
| 19  | (+)-Usniacin (D-Usnic acid)     | 0.69                | -1.79    | 0.67     | -2.02    | 0.71                 | -1.76    | 0.47     | -0.81    | 0.62                 | -3.02    | 0.52     | -1.74    |
| 24  | 10-Hydroxycamptothecin          | 0.96                | -12.57   | 0.42     | 0.41     | 0.11                 | 0.77     | 0.84     | -2.27    | 0.36                 | -0.08    | 0.24     | 0.69     |
| 38  | 3-Indolebutyric acid (IBA)      | 0.73                | -2.32    | 0.73     | -2.97    | 0.71                 | -2.38    | 0.51     | -0.22    | 0.52                 | -1.68    | 0.51     | -1.53    |
| 86  | 4-Methylumbelliferon (4-MU)     | 0.78                | -3.46    | 0.71     | -1.81    | 0.74                 | -2.98    | 0.68     | -2.34    | 0.64                 | -2.08    | 0.60     | -1.95    |
| 35  | 5-hydroxytryptophan (5-HTP)     | 0.90                | -3.19    | 0.96     | -10.52   | 1.01                 | -26.01   | 0.89     | -1.87    | 1.01                 | -8.00    | 0.97     | -10.82   |
| 49  | Aesculin (Esculin)              | 0.78                | -2.75    | 0.77     | -3.13    | 0.72                 | -2.42    | 0.52     | -0.28    | 0.57                 | -1.74    | 0.59     | -2.59    |
| 36  | Aloin (Barbaloin)               | 0.95                | -20.80   | 1.02     | -91.05   | 0.97                 | -4.73    | 1.01     | -64.72   | 1.12                 | -54.86   | 1.08     | -8.24    |
| 99  | Ammonium Glycyrrhizinate (AMGZ) | 0.95                | -15.11   | 0.90     | -5.05    | 0.90                 | -1.37    | 0.93     | -5.06    | 0.95                 | -6.10    | 0.82     | -1.34    |
| 11  | Amygdalin                       | 0.26                | 0.07     | 0.20     | 0.46     | 0.13                 | 0.54     | 0.09     | 0.66     | 0.17                 | -0.07    | 0.08     | 0.76     |
| 30  | Andrographolide                 | 0.80                | -3.84    | 0.48     | 0.17     | 0.69                 | -1.68    | 0.49     | -0.14    | 0.37                 | -0.87    | 0.35     | -0.79    |
| 81  | Apigenin                        | 0.81                | -3.43    | 0.77     | -2.47    | 0.78                 | -1.77    | 0.72     | -2.98    | 0.64                 | -2.51    | 0.53     | -1.14    |
| 79  | Apocynin (Acetovanillone)       | 1.08                | -2.72    | 0.99     | -18.96   | 0.87                 | -2.22    | 1.02     | -23.46   | 1.02                 | -13.61   | 0.83     | -2.44    |
| 53  | Arbutin (Uva, p-Arbutin)        | 0.88                | -9.12    | 0.80     | -3.65    | 0.69                 | -1.02    | 0.57     | -0.89    | 0.60                 | -2.55    | 0.56     | -1.98    |
| 75  | Artesunate                      | 0.86                | -7.27    | 0.59     | -0.90    | 0.30                 | 0.39     | 0.74     | -3.36    | 0.48                 | -1.16    | 0.24     | 0.56     |
| 14  | Asiatic acid                    | 0.90                | -11.77   | 0.76     | -3.77    | 0.68                 | -1.25    | 0.37     | -0.09    | 0.38                 | -0.83    | 0.48     | -2.06    |
| 34  | Astragaloside A                 | 1.10                | -3.58    | 0.93     | -3.02    | 0.91                 | -3.10    | 0.93     | -4.71    | 1.07                 | -42.57   | 0.98     | -34.90   |
| 68  | Azomycin (2-Nitroimidazole)     | 0.84                | -6.46    | 0.78     | -4.01    | 0.77                 | -4.15    | 0.68     | -2.42    | 0.58                 | -2.05    | 0.38     | -0.48    |
| 56  | Baicalein                       | 0.85                | -5.70    | 0.72     | -3.26    | 0.67                 | -2.01    | 0.49     | -0.32    | 0.47                 | -1.69    | 0.36     | -0.64    |
| 109 | Baicalin                        | 0.85                | -6.70    | 0.82     | -4.98    | 0.78                 | -3.48    | 0.73     | -3.05    | 0.62                 | -2.47    | 0.51     | -2.25    |
| 103 | Berberine Hydrochloride         | 0.83                | -6.42    | 0.80     | -5.14    | 0.72                 | -2.19    | 0.73     | -2.17    | 0.77                 | -5.00    | 0.74     | -5.49    |
| 65  | Bergenin (Cuscutin)             | 0.88                | -10.00   | 0.79     | -5.11    | 0.71                 | -2.07    | 0.56     | -0.80    | 0.58                 | -2.75    | 0.56     | -3.04    |
| 37  | Betulinic acid                  | 0.80                | -0.44    | 0.88     | -1.57    | 0.85                 | -2.04    | 0.50     | 0.46     | 0.61                 | -0.45    | 0.66     | -0.76    |

|     |   |      |        |      |        |      |         |      |         |      |        |      |        |      |        |      |         |      |        |
|-----|---|------|--------|------|--------|------|---------|------|---------|------|--------|------|--------|------|--------|------|---------|------|--------|
| 124 | Bilobalide  | 0.84 | -6.46  | 0.90 | -9.03  | 0.81 | -3.04   | 0.74 | -2.28   | 0.66 | -3.00  | 0.46 | -1.09  | 0.80 | -4.27  | 0.74 | -2.03   | 0.81 | -8.18  |
| 25  | Biochanin A (4-Methylgenistein)                     | 1.03 | -13.38 | 0.89 | -3.78  | 0.76 | -0.40   | 0.99 | -108.97 | 0.49 | -0.96  | 0.21 | 0.78   | 0.50 | 0.19   | 0.43 | 0.39    | 0.34 | 0.56   |
| 40  | Butylscopolamine bromide (Scopolamine butylbromide) | 1.02 | -13.32 | 0.45 | 0.17   | 0.15 | 0.75    | 0.86 | -1.62   | 0.32 | 0.06   | 0.18 | 0.84   | 0.67 | -0.35  | 0.29 | 0.57    | 0.30 | 0.61   |
| 77  | Caffeic acid  | 0.87 | -7.73  | 0.81 | -5.11  | 0.72 | -2.45   | 0.59 | -0.82   | 0.56 | -2.66  | 0.50 | -2.03  | 0.62 | -1.12  | 0.68 | -2.43   | 0.89 | -12.54 |
| 15  | Caffeic acid phenylethyl ester                      | 0.74 | -0.66  | 0.53 | 0.30   | 0.52 | 0.21    | 0.64 | -0.41   | 0.31 | 0.11   | 0.32 | 0.75   | 0.34 | 0.56   | 0.36 | 0.60    | 0.37 | 0.26   |
| 117 | Chlorogenic acid                                    | 0.85 | -6.52  | 0.88 | -7.77  | 0.86 | -7.27   | 0.78 | -2.87   | 0.66 | -3.13  | 0.45 | -1.68  | 0.83 | -3.39  | 0.92 | -46.64  | 0.87 | -9.47  |
| 101 | Chrysin   | 0.85 | -6.35  | 0.88 | -6.78  | 0.79 | -2.48   | 0.65 | -1.14   | 0.70 | -3.99  | 0.54 | -2.53  | 0.65 | -1.78  | 0.82 | -5.25   | 0.93 | -11.95 |
| 42  | Chrysophanic acid (Chrysophanol)                    | 1.04 | -9.43  | 0.30 | 0.50   | 0.10 | 0.73    | 0.79 | -0.85   | 0.30 | 0.07   | 0.16 | 0.75   | 0.70 | -0.37  | 0.36 | 0.57    | 0.28 | 0.70   |
| 102 | Cinchonidine  | 1.06 | -7.82  | 0.99 | -26.41 | 1.03 | -11.74  | 0.71 | -2.89   | 0.97 | -7.01  | 0.82 | -2.98  | 0.79 | -1.82  | 0.87 | -1.42   | 0.92 | -2.94  |
| 6   | Corosolic acid (CA)                                 | 1.03 | -9.80  | 0.89 | -3.47  | 1.05 | -10.03  | 0.41 | 0.46    | 0.50 | -0.82  | 0.63 | -0.67  | 0.12 | 0.76   | 0.40 | 0.58    | 0.36 | 0.54   |
| 27  | Cryptotanshinone                                    | 0.77 | -0.37  | 0.65 | 0.21   | 0.87 | -0.91   | 0.65 | -4.73   | 0.37 | -0.39  | 0.36 | 0.32   | 0.43 | 0.09   | 0.41 | 0.29    | 0.44 | 0.29   |
| 5   | Curcumin  | 0.87 | -1.79  | 0.67 | -0.46  | 0.87 | -1.32   | 0.34 | 0.60    | 0.49 | -0.41  | 0.52 | 0.32   | 0.09 | 0.76   | 0.13 | 0.72    | 0.49 | 0.44   |
| 32  | Curcumol  | 1.14 | -1.47  | 0.84 | -2.08  | 0.54 | -0.73   | 0.89 | -1.21   | 0.36 | -0.06  | 0.18 | 0.75   | 0.66 | -0.06  | 0.34 | 0.58    | 0.31 | 0.62   |
| 93  | Cyclocytidine HCl                                   | 0.76 | -2.01  | 0.36 | -0.23  | 0.16 | 0.80    | 0.63 | -2.57   | 0.17 | 0.09   | 0.09 | 0.79   | 0.72 | -1.44  | 0.17 | 0.69    | 0.11 | 0.74   |
| 57  | Cyclosporin A (Cyclosporine A)                      | 0.96 | -24.79 | 0.76 | -0.54  | 0.58 | 0.40    | 0.52 | -0.42   | 0.74 | -1.62  | 0.42 | 0.29   | 0.70 | -0.69  | 0.68 | -0.50   | 0.62 | 0.38   |
| 140 | Cytisine (Baphitoxine, Sophorine)                   | 0.89 | -3.79  | 0.88 | -1.62  | 0.94 | -4.40   | 0.96 | -33.66  | 0.85 | -3.38  | 0.83 | -3.81  | 0.97 | -24.99 | 0.92 | -3.82   | 1.09 | -7.86  |
| 58  | Dihydroartemisinin (DHA)                            | 1.06 | -7.99  | 0.58 | 0.30   | 0.28 | 0.82    | 0.68 | -1.78   | 0.63 | -0.61  | 0.36 | 0.71   | 0.69 | -0.69  | 0.51 | 0.28    | 0.60 | 0.27   |
| 95  | Dihydromyricetin (Ampeloptin)                       | 0.94 | -10.61 | 0.91 | -1.92  | 0.98 | -9.81   | 0.87 | -2.84   | 1.07 | -41.62 | 0.99 | -60.41 | 0.77 | -1.45  | 0.91 | -2.93   | 1.12 | -2.86  |
| 2   | Dioscin (Collettiside III)                          | 0.11 | 0.59   | 0.14 | 0.71   | 0.09 | 0.83    | 0.06 | 0.83    | 0.13 | 0.24   | 0.10 | 0.85   | 0.03 | 0.81   | 0.04 | 0.79    | 0.05 | 0.81   |
| 50  | Diosmetin (Luteolin 4-methyl ether)                 | 1.11 | -3.76  | 0.97 | -14.16 | 0.90 | -1.76   | 1.05 | -12.76  | 0.82 | -2.27  | 0.70 | -0.12  | 0.59 | -0.46  | 0.58 | 0.29    | 0.40 | 0.51   |
| 121 | Diosmin   | 0.96 | -10.62 | 0.91 | -1.69  | 0.95 | -7.57   | 0.94 | -26.55  | 0.85 | -3.05  | 0.88 | -5.25  | 0.83 | -3.82  | 0.63 | -0.02   | 0.96 | -6.19  |
| 71  | DL-Carnitine hydrochloride                          | 1.06 | -6.71  | 0.88 | -2.14  | 0.89 | -1.37   | 0.67 | -2.12   | 0.86 | -2.32  | 0.80 | -2.86  | 0.77 | -0.99  | 0.83 | -0.72   | 0.87 | -2.95  |
| 92  | D-Mannitol (Osmitol)                                | 1.04 | -9.60  | 1.18 | -1.88  | 1.07 | -2.98   | 1.21 | -3.84   | 1.40 | -5.22  | 1.03 | -21.76 | 0.76 | -1.43  | 0.88 | -1.76   | 1.07 | -5.65  |
| 46  | Emodin  | 0.90 | -4.74  | 0.90 | -1.81  | 0.87 | -0.92   | 0.72 | -5.41   | 0.70 | -1.25  | 0.85 | -6.46  | 0.65 | -0.41  | 0.71 | 0.11    | 1.17 | -1.93  |
| 21  | Enoxolone (Glycyrrhetin)                            | 1.05 | -7.55  | 0.81 | -0.47  | 0.68 | -1.09   | 0.53 | -0.49   | 0.38 | -0.04  | 0.20 | 0.73   | 0.34 | 0.37   | 0.40 | 0.66    | 0.26 | 0.54   |
| 82  | Epi-Corosolic acid (ECA)                            | 0.97 | -22.08 | 1.07 | -6.52  | 1.00 | -990.96 | 0.89 | -3.13   | 1.17 | -14.14 | 1.33 | -0.46  | 0.70 | -1.18  | 1.00 | -316.60 | 1.59 | 0.26   |
| 55  | Epi-Maslinic acid (EMA)                             | 0.95 | -6.13  | 1.00 | -45.02 | 1.00 | -77.25  | 0.86 | -4.18   | 1.10 | -90.77 | 1.05 | -8.34  | 0.61 | -0.66  | 0.91 | -5.26   | 1.51 | 0.08   |
| 78  | Epi-Ursolic acid (EUA)                              | 0.96 | -11.95 | 0.87 | -1.72  | 0.95 | -6.51   | 0.70 | -0.46   | 1.14 | -18.84 | 1.24 | -0.91  | 0.62 | -1.13  | 0.95 | -19.13  | 1.36 | -1.59  |

|     |                               |      |         |      |         |      |        |      |        |      |         |      |        |      |        |      |        |      |        |
|-----|-------------------------------|------|---------|------|---------|------|--------|------|--------|------|---------|------|--------|------|--------|------|--------|------|--------|
| 90  | Fisetin (Fustel)              | 0.98 | -224.82 | 0.88 | -2.64   | 0.85 | -0.93  | 0.88 | -11.79 | 0.73 | -1.82   | 0.66 | -0.32  | 0.78 | -1.35  | 0.65 | -0.05  | 0.77 | -0.44  |
| 64  | Formononetin (Formononetol)   | 1.06 | -7.87   | 0.96 | -8.46   | 0.93 | -5.24  | 0.71 | -2.04  | 0.83 | -2.35   | 0.89 | -4.16  | 0.64 | -0.84  | 0.86 | -1.98  | 1.08 | -3.25  |
| 139 | Fumalic acid (Ferulic acid)   | 1.02 | -16.13  | 1.02 | -46.08  | 1.01 | -49.82 | 0.98 | -55.31 | 1.11 | -89.98  | 0.78 | -3.86  | 0.97 | -19.79 | 0.86 | -1.69  | 1.20 | -1.68  |
| 113 | Gastrodin (Gastrodine)        | 1.05 | -9.09   | 1.01 | -125.38 | 0.97 | -10.62 | 1.04 | -14.09 | 0.96 | -7.18   | 0.97 | -24.03 | 0.77 | -2.66  | 0.79 | -0.53  | 0.88 | -2.32  |
| 100 | Genistein                     | 0.92 | -8.06   | 0.83 | -1.62   | 0.77 | -1.85  | 0.76 | 0.20   | 1.10 | -437.12 | 0.70 | -0.30  | 0.78 | -1.75  | 0.84 | -3.87  | 0.59 | -0.12  |
| 87  | Glycyrrhizic acid             | 1.06 | -6.01   | 1.06 | -10.37  | 0.92 | -2.69  | 0.71 | -3.00  | 0.85 | -1.74   | 0.74 | -0.56  | 0.60 | -1.25  | 0.84 | -1.05  | 0.88 | -3.32  |
| 12  | Gossypol                      | 0.84 | -3.01   | 0.62 | -0.01   | 0.38 | 0.26   | 0.57 | -4.22  | 0.28 | 0.06    | 0.17 | 0.71   | 0.11 | 0.70   | 0.28 | 0.43   | 0.25 | 0.54   |
| 26  | Gramine                       | 1.00 | -30.43  | 0.98 | -13.20  | 0.94 | -3.50  | 0.73 | -2.70  | 0.92 | -3.42   | 0.75 | -0.81  | 0.65 | 0.11   | 0.84 | -1.89  | 0.75 | -1.35  |
| 16  | Guanosine                     | 1.06 | -4.56   | 0.96 | -9.22   | 0.85 | -2.24  | 0.98 | -21.86 | 1.05 | -21.80  | 0.84 | -3.07  | 0.54 | 0.48   | 1.24 | -1.64  | 1.29 | -0.37  |
| 29  | Gynostemma Extract            | 0.99 | -81.67  | 0.93 | -6.61   | 0.95 | -3.58  | 0.84 | -8.92  | 0.80 | -2.20   | 0.88 | -6.13  | 0.63 | 0.02   | 0.89 | -3.96  | 1.32 | -0.93  |
| 31  | Hematoxylin (Hydroxybrazilin) | 0.97 | -37.02  | 1.08 | -5.96   | 0.94 | -3.09  | 0.93 | -10.36 | 1.12 | -63.94  | 0.78 | -0.82  | 0.59 | -0.01  | 0.71 | -0.49  | 0.79 | -0.62  |
| 73  | Hesperetin                    | 1.06 | -7.17   | 1.02 | -54.60  | 0.94 | -3.06  | 0.84 | -5.06  | 0.87 | -2.54   | 0.79 | -1.31  | 0.68 | -1.03  | 0.91 | -2.59  | 1.07 | -5.50  |
| 131 | Hesperidin                    | 1.03 | -8.50   | 1.04 | -17.49  | 1.05 | -7.19  | 0.97 | -36.97 | 0.92 | -3.54   | 0.90 | -7.17  | 1.11 | -7.94  | 0.90 | -4.19  | 1.05 | -31.24 |
| 7   | Honokiol                      | 0.90 | -7.71   | 0.61 | 0.13    | 0.76 | -0.11  | 0.20 | 0.77   | 0.44 | -0.20   | 0.34 | 0.16   | 0.12 | 0.76   | 0.30 | 0.56   | 0.37 | 0.21   |
| 137 | Hordenine                     | 1.07 | -5.68   | 0.99 | -15.10  | 1.02 | -16.19 | 1.12 | -2.83  | 1.02 | -10.50  | 0.96 | -6.75  | 0.95 | -16.27 | 0.86 | -0.84  | 0.84 | -1.21  |
| 134 | Hyodeoxycholic acid (HDCA)    | 1.02 | -13.23  | 1.09 | -3.76   | 0.94 | -1.86  | 0.92 | -15.24 | 0.92 | -4.49   | 0.87 | -4.66  | 1.09 | -10.14 | 0.91 | -4.75  | 1.29 | -1.59  |
| 116 | Hypoxanthine                  | 1.14 | -1.21   | 1.10 | -3.84   | 1.02 | -12.89 | 0.99 | -31.42 | 1.30 | -5.32   | 0.82 | -1.96  | 0.92 | -3.36  | 1.05 | -6.95  | 1.23 | -1.45  |
| 61  | Icariin                       | 1.00 | -25.86  | 1.06 | -7.97   | 0.88 | -1.28  | 0.87 | -6.38  | 0.88 | -2.75   | 0.92 | -6.72  | 0.72 | -0.76  | 0.87 | -2.15  | 1.03 | -10.25 |
| 20  | Indirubin                     | 0.83 | -2.62   | 0.86 | -1.29   | 0.73 | 0.25   | 0.71 | -1.84  | 0.84 | -4.96   | 0.61 | -0.34  | 0.51 | 0.37   | 0.64 | 0.25   | 0.77 | -0.14  |
| 129 | Indole-3-carbinol             | 1.00 | -23.81  | 1.11 | -4.42   | 1.06 | -2.67  | 0.93 | -17.35 | 0.94 | -4.00   | 0.91 | -6.34  | 1.07 | -5.93  | 0.95 | -8.00  | 1.25 | -1.02  |
| 130 | Inosine                       | 1.16 | -0.88   | 1.14 | -2.20   | 1.02 | -11.34 | 0.99 | -31.78 | 1.33 | -5.38   | 0.76 | -1.27  | 0.87 | -6.62  | 1.06 | -11.74 | 1.12 | -3.85  |
| 23  | Ipriflavone                   | 1.05 | -3.41   | 1.15 | -2.19   | 1.01 | -28.63 | 0.87 | -1.67  | 1.22 | -9.11   | 1.21 | -2.46  | 0.48 | 0.28   | 0.68 | -0.12  | 1.07 | -8.42  |
| 43  | Isoliquiritigenin             | 0.99 | -292.45 | 0.84 | -0.97   | 0.94 | -4.03  | 0.71 | 0.27   | 0.94 | -4.83   | 0.97 | -19.32 | 0.61 | -0.38  | 1.03 | -15.41 | 1.49 | -0.01  |
| 98  | Kaempferol                    | 0.93 | -7.32   | 0.97 | -8.90   | 1.07 | -3.08  | 0.88 | -0.73  | 1.19 | -16.81  | 0.96 | -9.93  | 0.71 | -1.62  | 0.90 | -3.26  | 0.85 | -1.09  |
| 74  | Kinetin (6-Furfuryladenine)   | 0.89 | -3.72   | 0.92 | -3.72   | 0.91 | -3.67  | 0.75 | -0.29  | 0.86 | -2.20   | 0.90 | -2.83  | 0.83 | -1.03  | 1.13 | -1.61  | 1.17 | -1.51  |
| 97  | L (+)-Rhamnose Monohydrate    | 0.86 | -1.83   | 0.92 | -3.32   | 0.99 | -22.51 | 0.73 | -0.51  | 1.02 | -13.59  | 0.85 | -0.86  | 0.69 | -1.60  | 0.81 | -0.76  | 0.85 | -2.58  |
| 132 | Lappaconite Hydrobromide      | 1.08 | -5.17   | 1.02 | -54.11  | 0.96 | -5.16  | 1.16 | -2.66  | 0.99 | -9.05   | 0.86 | -1.74  | 0.90 | -8.42  | 0.79 | -0.16  | 0.68 | -0.50  |
| 45  | Limonin                       | 0.86 | -3.60   | 0.92 | -3.48   | 0.95 | -6.23  | 0.75 | -0.55  | 0.83 | -1.51   | 0.90 | -2.26  | 0.73 | -0.40  | 0.96 | -13.84 | 1.28 | -1.62  |
| 54  | Luteolin                      | 0.88 | -2.03   | 0.90 | -2.56   | 1.07 | -6.75  | 0.72 | -0.35  | 1.11 | -90.57  | 0.80 | -0.65  | 0.70 | -0.65  | 0.71 | -0.65  | 0.87 | -2.10  |

|     |  |      |         |      |         |      |         |      |        |      |        |      |        |      |        |      |       |      |        |
|-----|--|------|---------|------|---------|------|---------|------|--------|------|--------|------|--------|------|--------|------|-------|------|--------|
| 9   | Magnolol                               | 0.67 | -0.28   | 0.69 | -0.27   | 0.81 | -1.91   | 0.31 | 0.02   | 0.38 | -0.10  | 0.46 | -0.50  | 0.14 | 0.74   | 0.32 | 0.58  | 0.47 | 0.16   |
| 4   | Maslinic acid (MA)                     | 1.00 | -22.77  | 0.85 | -1.84   | 0.97 | -13.80  | 0.44 | 0.29   | 0.87 | -3.38  | 0.77 | -1.78  | 0.10 | 0.77   | 0.35 | 0.56  | 0.52 | 0.38   |
| 70  | Matrine ((+)-Matrine)                  | 0.93 | -7.29   | 0.99 | -23.96  | 0.99 | -70.75  | 0.68 | 0.23   | 0.98 | -7.18  | 0.86 | -3.93  | 0.72 | -0.98  | 0.61 | 0.17  | 0.69 | -0.96  |
| 72  | Methyl-Hesperidin                      | 0.89 | -3.53   | 0.96 | -5.58   | 0.94 | -4.40   | 0.68 | -0.14  | 0.33 | -0.08  | 0.28 | 0.69   | 0.73 | -1.01  | 0.44 | 0.47  | 0.55 | 0.07   |
| 63  | Morin hydrate (Aurantica)              | 0.99 | -451.48 | 0.31 | 0.56    | 0.13 | 0.78    | 0.63 | 0.10   | 0.27 | 0.14   | 0.18 | 0.77   | 0.65 | -0.84  | 0.32 | 0.56  | 0.32 | 0.57   |
| 66  | Myricetin (Cannabiscetin)              | 0.87 | -2.48   | 0.90 | -3.58   | 0.94 | -7.67   | 0.68 | -0.44  | 0.75 | -1.04  | 0.72 | -0.10  | 0.69 | -0.90  | 0.75 | -0.45 | 0.92 | -5.03  |
| 76  | Myricitrin (Myricitrine)               | 1.01 | -22.49  | 1.01 | -117.47 | 1.03 | -11.90  | 0.73 | -0.17  | 0.91 | -3.19  | 0.83 | -0.76  | 0.69 | -1.06  | 0.77 | -0.70 | 0.78 | -1.05  |
| 104 | Nalidixic acid (NegGram)               | 0.95 | -15.09  | 1.12 | -4.92   | 0.98 | -22.89  | 0.84 | -2.96  | 0.93 | -3.96  | 0.99 | -71.15 | 0.78 | -1.89  | 0.96 | -6.69 | 1.15 | -3.88  |
| 126 | Naringenin                             | 0.96 | -16.62  | 1.05 | -13.65  | 1.04 | -6.12   | 1.08 | -3.48  | 1.18 | -9.18  | 0.93 | -3.42  | 0.90 | -4.56  | 1.06 | -4.48 | 1.06 | -11.15 |
| 41  | Naringin (Naringoside)                 | 1.01 | -19.85  | 1.11 | -3.99   | 1.02 | -16.92  | 0.71 | 0.29   | 0.93 | -3.87  | 0.78 | -1.28  | 0.71 | -0.36  | 0.78 | -0.71 | 0.86 | -1.14  |
| 69  | Naringin Dihydrochalcone (Naringin DC) | 1.05 | -5.90   | 1.14 | -3.36   | 0.95 | -2.97   | 1.15 | -3.52  | 1.29 | -8.29  | 0.93 | -7.24  | 0.76 | -0.95  | 0.87 | -2.44 | 0.89 | -2.10  |
| 96  | Neohesperidin                          | 1.03 | -12.79  | 1.07 | -4.08   | 1.00 | -429.24 | 0.69 | -0.17  | 0.89 | -2.33  | 0.79 | -1.13  | 0.74 | -1.45  | 0.79 | -0.38 | 0.90 | -2.22  |
| 111 | Neohesperidin dihydrochalcone (Nhdc)   | 0.91 | -6.02   | 0.97 | -8.23   | 0.91 | -3.66   | 0.74 | -0.78  | 0.87 | -2.82  | 0.85 | -0.60  | 0.79 | -2.45  | 0.96 | -7.53 | 1.19 | -2.97  |
| 60  | Nobiletin (Hexamethoxyflavone)         | 0.97 | -44.59  | 1.12 | -4.37   | 0.99 | -36.45  | 0.62 | -0.15  | 0.94 | -4.56  | 1.08 | -5.48  | 0.64 | -0.72  | 0.87 | -2.41 | 1.78 | 0.58   |
| 28  | Oleanolic Acid (Caryophyllin)          | 1.05 | -7.24   | 1.11 | -1.88   | 1.01 | -20.10  | 0.59 | 0.30   | 0.81 | -1.49  | 0.76 | 0.24   | 0.58 | 0.08   | 0.67 | 0.20  | 0.74 | -0.82  |
| 8   | Oridonin (Isodonol)                    | 1.10 | -4.58   | 0.87 | -1.46   | 0.99 | -74.64  | 0.57 | -1.84  | 0.29 | -0.20  | 0.17 | 0.34   | 0.12 | 0.75   | 0.04 | 0.80  | 0.05 | 0.80   |
| 88  | Orotic acid (6-Carboxyuracil)          | 1.03 | -11.37  | 1.03 | -22.85  | 1.00 | -652.73 | 0.76 | -0.23  | 0.87 | -2.32  | 0.71 | -0.51  | 0.76 | -1.31  | 0.81 | -0.44 | 0.85 | -1.33  |
| 85  | Osthole (Osthol)                       | 0.98 | -577.66 | 1.05 | -11.49  | 0.87 | -1.46   | 0.69 | -1.27  | 0.86 | -2.52  | 0.78 | -0.24  | 0.70 | -1.23  | 0.76 | -1.09 | 1.09 | -2.55  |
| 122 | Oxymatrine (Matrine N-oxide)           | 1.07 | -5.22   | 1.10 | -3.93   | 0.99 | -24.72  | 0.77 | -0.34  | 0.95 | -5.61  | 0.83 | -1.32  | 0.86 | -3.92  | 0.77 | -0.64 | 0.97 | -10.63 |
| 118 | Paeonol (Peonol)                       | 1.00 | -22.79  | 1.14 | -1.90   | 0.98 | -23.68  | 0.79 | -3.79  | 0.91 | -4.06  | 0.88 | -3.12  | 0.83 | -3.57  | 0.91 | -3.32 | 1.13 | -3.60  |
| 62  | Palmatine chloride                     | 1.01 | -18.26  | 1.05 | -12.14  | 0.96 | -4.97   | 0.79 | -0.80  | 1.16 | -14.90 | 1.20 | -2.22  | 0.71 | -0.78  | 1.55 | -0.71 | 2.40 | 0.62   |
| 13  | Parthenolide ((-)-Parthenolide)        | 1.31 | -1.15   | 0.69 | -0.59   | 0.68 | -0.74   | 1.18 | -6.47  | 0.60 | -2.61  | 0.21 | 0.74   | 0.12 | 0.67   | 0.27 | 0.64  | 0.29 | 0.54   |
| 135 | Phloretin (Dihydronaringenin)          | 0.92 | -4.29   | 0.99 | -25.49  | 0.99 | -38.18  | 0.89 | -5.51  | 0.99 | -7.23  | 1.03 | -9.16  | 0.95 | -10.45 | 1.09 | -3.52 | 1.43 | -0.45  |
| 110 | Phlorizin (Phloridzin)                 | 1.01 | -22.13  | 0.85 | -1.69   | 1.00 | -56.59  | 0.92 | -12.80 | 1.23 | -11.61 | 0.93 | -6.11  | 0.84 | -2.31  | 0.84 | -0.98 | 0.92 | -8.89  |
| 94  | Piperine (1-Piperoylpiperidine)        | 0.89 | -2.60   | 0.98 | -12.11  | 0.98 | -10.14  | 0.85 | -2.71  | 0.90 | -3.15  | 0.90 | -2.01  | 0.74 | -1.45  | 0.96 | -7.35 | 1.40 | -0.56  |
| 138 | Polydatin(Piceid)                      | 1.08 | -4.22   | 1.07 | -7.33   | 0.95 | -3.70   | 1.19 | -0.53  | 1.06 | -39.83 | 0.84 | -2.98  | 0.96 | -17.80 | 0.85 | -0.56 | 0.69 | -0.07  |
| 127 | Puerarin (Kakonein)                    | 1.10 | -4.27   | 0.94 | -2.70   | 1.05 | -5.72   | 0.98 | -45.17 | 1.32 | -8.52  | 0.95 | -10.52 | 0.88 | -5.86  | 0.91 | -3.97 | 1.14 | -2.13  |
| 51  | Quercetin (Sophoretin)                 | 1.00 | -23.66  | 1.09 | -6.17   | 0.86 | -1.10   | 1.02 | -51.19 | 1.01 | -14.44 | 0.62 | -0.59  | 0.56 | -0.49  | 0.43 | 0.42  | 0.68 | -0.10  |

|     |                                     |      |        |      |        |      |        |         |         |       |        |         |         |        |         |       |        |       |         |       |
|-----|-------------------------------------|------|--------|------|--------|------|--------|---------|---------|-------|--------|---------|---------|--------|---------|-------|--------|-------|---------|-------|
| 33  | Quercetin dihydrate<br>(Sophoretin) | 0.85 | -1.46  | 0.93 | -5.78  | 0.93 | -4.24  | 0.77    | -1.65   | 0.75  | -1.53  | 0.71    | -0.41   | 0.62   | -0.06   | 0.64  | 0.21   | 0.73  | -0.08   |       |
| 67  | Resveratrol                         | 1.09 | -2.56  | 1.03 | -33.03 | 1.02 | -10.99 | 1.16    | -1.45   | 1.08  | -59.09 | 0.82    | -2.09   | 0.76   | -0.92   | 0.79  | -0.86  | 0.81  | -0.83   |       |
| 136 | Rheochrysidin (Physcione)           | 0.91 | -7.54  | 0.98 | -11.42 | 0.96 | -6.22  | 0.75    | -0.32   | 1.02  | -9.97  | 1.12    | -3.96   | 0.98   | -13.69  | 1.24  | -2.79  | 1.44  | -1.12   |       |
| 112 | Rotundine                           | 1.14 | -1.09  | 1.13 | -2.66  | 1.02 | -24.89 | 1.00    | -595.65 | 1.18  | -13.64 | 0.89    | -3.46   | 0.80   | -2.55   | 0.88  | -1.55  | 1.07  | -5.78   |       |
| 18  | Rutaecarpine (Rutecarpine)          | 0.95 | -15.77 | 0.87 | -2.18  | 0.92 | -2.96  | 0.61    | -2.70   | 0.98  | -10.86 | 1.00    | -130.25 | 0.56   | 0.40    | 0.92  | -4.67  | 1.53  | -0.32   |       |
| 115 | Rutin (Rutoside)                    | 0.87 | -1.35  | 0.91 | -1.83  | 0.97 | -5.99  | 0.85    | -2.61   | 0.85  | -2.24  | 0.86    | -0.34   | 0.87   | -3.33   | 0.91  | -3.12  | 1.25  | -1.08   |       |
| 133 | Salicin (Salicoside, Salicine)      | 1.06 | -7.51  | 0.94 | -5.96  | 0.98 | -14.01 | 1.00    | -596.77 | 1.06  | -24.81 | 0.89    | -2.98   | 0.86   | -8.92   | 0.85  | -0.78  | 0.91  | -2.70   |       |
| 106 | Salidroside (Rhodioloside)          | 0.87 | -2.02  | 0.90 | -2.18  | 1.04 | -7.18  | 0.88    | -2.38   | 1.13  | -29.66 | 1.00    | -152.55 | 0.83   | -2.06   | 0.91  | -2.32  | 1.18  | -4.66   |       |
| 10  | Sclareol                            | 0.77 | -0.95  | 0.75 | -0.68  | 0.80 | -0.63  | 0.21    | 0.64    | 0.42  | -0.14  | 0.46    | 0.19    | 0.15   | 0.73    | 0.42  | 0.46   | 0.65  | -0.79   |       |
| 17  | Sclareolide<br>(Norambreinolide)    | 1.05 | -10.68 | 0.92 | -3.94  | 0.95 | -8.65  | 0.84    | -9.20   | 0.88  | -2.58  | 0.80    | -0.22   | 0.27   | 0.46    | 0.53  | 0.24   | 0.68  | -0.98   |       |
| 128 | Sesamin (Fagarol)                   | 1.08 | -3.47  | 1.12 | -3.65  | 0.96 | -5.20  | 1.18    | -2.01   | 1.14  | -30.73 | 1.07    | -7.19   | 0.90   | -5.87   | 1.18  | -12.73 | 0.93  | -3.65   |       |
| 114 | Shikimic acid (Shikimate)           | 0.94 | -8.34  | 1.05 | -6.68  | 1.07 | -4.35  | 0.92    | -4.83   | 0.97  | -5.83  | 0.94    | -8.55   | 0.81   | -3.02   | 0.88  | -1.70  | 1.14  | -2.16   |       |
| 1   | Shikonin                            | 0.14 | 0.57   | 0.19 | 0.66   | 0.10 | 0.82   | 0.05    | 0.84    | 0.16  | 0.01   | 0.15    | 0.74    | 0.02   | 0.81    | 0.03  | 0.79   | 0.02  | 0.82    |       |
| 107 | Silibinin (Silybin)                 | 1.06 | -5.13  | 1.03 | -33.79 | 1.00 | -40.73 | 1.00    | -210.79 | 0.97  | -6.21  | 0.89    | -3.66   | 0.78   | -2.13   | 0.90  | -3.17  | 1.07  | -8.33   |       |
| 123 | Silymarin (Silybin B)               | 0.87 | -2.51  | 0.91 | -2.65  | 1.04 | -7.48  | 0.78    | -2.02   | 0.87  | -2.74  | 0.81    | -0.14   | 0.94   | -3.99   | 1.02  | -31.46 | 1.46  | 0.17    |       |
| 119 | Sinomenine (Cucoine)                | 1.06 | -5.01  | 1.08 | -7.62  | 1.07 | -5.16  | 1.13    | -6.24   | 1.03  | -16.56 | 0.86    | -1.63   | 0.84   | -3.57   | 0.89  | -1.84  | 0.90  | -3.25   |       |
| 47  | Sodium Danshensu                    | 0.97 | -59.48 | 0.95 | -6.16  | 1.00 | -      | 6751.80 | 0.77    | -0.22 | 1.09   | -347.11 | 0.95    | -10.16 | 0.76    | -0.43 | 1.15   | -3.39 | 1.21    | -0.83 |
| 84  | Sophocarpine                        | 1.07 | -3.97  | 0.33 | 0.49   | 0.11 | 0.78   | 0.85    | -1.44   | 0.32  | -0.03  | 0.19    | 0.77    | 0.80   | -1.23   | 0.29  | 0.66   | 0.35  | 0.48    |       |
| 105 | Sorbitol (Glucitol)                 | 1.07 | -3.88  | 1.18 | -2.00  | 1.08 | -4.96  | 1.13    | -4.95   | 1.48  | -3.16  | 1.20    | -3.15   | 0.85   | -2.01   | 0.97  | -18.87 | 1.06  | -3.94   |       |
| 142 | Synephrine (Oxedrine)               | 0.95 | -14.34 | 1.00 | -42.88 | 1.03 | -10.16 | 0.85    | -3.75   | 0.91  | -2.95  | 0.81    | -1.44   | 1.00   | -379.01 | 0.92  | -2.45  | 1.31  | -1.01   |       |
| 108 | Tangeretin (Tangeritin)             | 1.05 | -7.73  | 1.13 | -2.51  | 1.04 | -6.21  | 1.04    | -24.78  | 1.07  | -50.82 | 0.91    | -5.31   | 0.75   | -2.17   | 0.82  | -2.85  | 1.38  | -1.19   |       |
| 89  | Tanshinone I                        | 0.92 | -5.64  | 0.68 | -0.86  | 0.95 | -5.34  | 0.66    | -0.39   | 0.57  | -0.47  | 0.53    | 0.58    | 0.80   | -1.32   | 0.37  | 0.03   | 0.62  | 0.23    |       |
| 52  | Tanshinone IIA (Tanshinone B)       | 1.04 | -7.67  | 0.92 | -2.65  | 0.92 | -3.64  | 0.96    | -18.42  | 0.84  | -2.56  | 0.52    | 0.33    | 0.72   | -0.50   | 0.81  | -1.63  | 1.00  | -160.32 |       |
| 120 | Taxifolin (Dihydroquercetin)        | 0.96 | -18.04 | 0.97 | -14.03 | 1.00 | -39.76 | 0.87    | -2.70   | 0.90  | -2.75  | 0.89    | -2.25   | 1.10   | -3.64   | 0.97  | -10.60 | 1.40  | -0.28   |       |
| 141 | Tetrahydropapaverine hydrochloride  | 1.05 | -4.91  | 1.05 | -7.63  | 0.97 | -7.81  | 1.12    | -3.60   | 1.03  | -14.31 | 0.89    | -3.64   | 1.00   | -218.41 | 0.88  | -2.31  | 0.99  | -17.98  |       |
| 22  | Tetrandrine (Fanchinine)            | 0.85 | -2.50  | 0.53 | 0.29   | 0.47 | -0.08  | 0.54    | 0.04    | 0.22  | 0.13   | 0.16    | 0.74    | 0.32   | 0.30    | 0.21  | 0.61   | 0.15  | 0.68    |       |
| 59  | Triptolide                          | 1.04 | -4.47  | 0.22 | 0.62   | 0.19 | 0.75   | 0.97    | -8.01   | 0.29  | 0.00   | 0.21    | 0.76    | 0.60   | -0.70   | 0.25  | 0.64   | 0.42  | 0.47    |       |
| 125 | Troxerutin                          | 0.94 | -10.42 | 1.00 | -30.06 | 1.07 | -3.01  | 0.92    | -5.81   | 0.97  | -5.27  | 0.88    | -1.02   | 1.07   | -4.48   | 0.95  | -4.83  | 1.42  | -0.73   |       |
| 3   | Ursolic acid (Malol)                | 1.00 | -53.89 | 1.06 | -15.07 | 1.03 | -11.70 | 0.69    | -0.19   | 0.17  | 0.11   | 0.20    | 0.80    | 0.10   | 0.78    | 0.12  | 0.68   | 0.10  | 0.79    |       |

|    |  |      |        |      |         |         |        |        |        |       |        |        |        |        |       |       |        |        |       |       |
|----|--|------|--------|------|---------|---------|--------|--------|--------|-------|--------|--------|--------|--------|-------|-------|--------|--------|-------|-------|
| 91 | Vanillin                               | 1.05 | -3.69  | 1.05 | -11.89  | 0.90    | -2.70  | 1.16   | -1.92  | 1.11  | -83.81 | 0.84   | -2.34  | 0.80   | -1.36 | 0.99  | -31.97 | 1.22   | -0.92 |       |
| 44 | Vanillylacetone                        | 0.96 | -16.18 | 1.01 | -       | 6096.09 | 1.01   | -23.84 | 1.08   | -9.72 | 1.07   | -38.01 | 0.97   | -14.26 | 0.80  | -0.39 | 0.99   | -25.86 | 1.19  | -1.86 |
| 48 | Xanthone (Genicide)                    | 0.88 | -2.73  | 1.02 | -200.37 | 1.01    | -28.07 | 0.89   | -2.55  | 1.07  | -35.15 | 1.01   | -86.63 | 0.72   | -0.44 | 0.85  | -1.89  | 0.90   | -1.64 |       |
| 39 | Yohimbine hydrochloride<br>(Antagonil) | 0.95 | -18.74 | 0.96 | -9.73   | 0.95    | -2.50  | 1.05   | -18.57 | 1.05  | -28.98 | 0.84   | -1.13  | 0.65   | -0.16 | 0.92  | -3.80  | 1.08   | -3.97 |       |
| 83 | $\beta$ -Sitosterol                    | 0.91 | -11.67 | 0.88 | -8.33   | 0.73    | -2.99  | 0.58   | -0.84  | 0.68  | -3.56  | 0.59   | -3.19  | 0.60   | -1.21 | 0.67  | -2.65  | 0.72   | -4.51 |       |

**Supplementary Table 2.** ATP bioluminescence values (normalized to control; mean  $\pm$  standard deviation of 4 replicates) and z-factor derived from the ATP values in HMVP2 cells treated with UA in combination with each of the natural compounds listed at 20  $\mu$ M dose and for 12, 24 or 48 hours.

|   | 12 hours        |          | 24 hours        |          | 48 hours        |          |
|---|-----------------|----------|-----------------|----------|-----------------|----------|
|   | ATP             | z-factor | ATP             | z-factor | ATP             | z-factor |
| (-)-Epigallocatechin gallate                        | 0.08 $\pm$ 0.08 | 0.21     | 0.08 $\pm$ 0.07 | 0.34     | 0.05 $\pm$ 0.04 | 0.63     |
| (+)-Usniacin (D-Usnic acid)                         | 0.04 $\pm$ 0.03 | 0.41     | 0.06 $\pm$ 0.05 | 0.44     | 0.05 $\pm$ 0.04 | 0.64     |
| 10-Hydroxycamptothecin                              | 0.07 $\pm$ 0.01 | 0.45     | 0.12 $\pm$ 0.03 | 0.46     | 0.10 $\pm$ 0.01 | 0.72     |
| 3-Indolebutyric acid (IBA)                          | 0.08 $\pm$ 0.07 | 0.23     | 0.12 $\pm$ 0.11 | 0.18     | 0.07 $\pm$ 0.05 | 0.59     |
| 4-Methylumbelliferon (4-MU)                         | 0.05 $\pm$ 0.03 | 0.38     | 0.11 $\pm$ 0.08 | 0.28     | 0.09 $\pm$ 0.09 | 0.48     |
| 5-Hydroxytryptophan (5-HTP)                         | 0.18 $\pm$ 0.03 | 0.29     | 0.15 $\pm$ 0.04 | 0.40     | 0.11 $\pm$ 0.02 | 0.67     |
| Aesculin (Esculin)                                  | 0.02 $\pm$ 0.01 | 0.46     | 0.06 $\pm$ 0.05 | 0.43     | 0.05 $\pm$ 0.03 | 0.66     |
| Aloin (Barbaloin)                                   | 0.11 $\pm$ 0.01 | 0.43     | 0.24 $\pm$ 0.05 | 0.28     | 0.19 $\pm$ 0.15 | 0.16     |
| Ammonium Glycyrrhizinate (AMGZ)                     | 0.28 $\pm$ 0.03 | 0.19     | 0.17 $\pm$ 0.02 | 0.45     | 0.23 $\pm$ 0.22 | -0.12    |
| Amygdalin   | 0.02 $\pm$ 0.03 | 0.41     | 0.05 $\pm$ 0.03 | 0.48     | 0.18 $\pm$ 0.21 | -0.02    |
| Andrographolide                                     | 0.05 $\pm$ 0.05 | 0.34     | 0.14 $\pm$ 0.09 | 0.22     | 0.39 $\pm$ 0.20 | -0.36    |
| Apigenin  | 0.07 $\pm$ 0.07 | 0.24     | 0.10 $\pm$ 0.10 | 0.23     | 0.11 $\pm$ 0.11 | 0.38     |
| Apocynin (Acetovanillone)                           | 0.11 $\pm$ 0.02 | 0.39     | 0.17 $\pm$ 0.06 | 0.33     | 0.11 $\pm$ 0.02 | 0.70     |
| Arbutin (Uva, p-Arbutin)                            | 0.08 $\pm$ 0.06 | 0.28     | 0.13 $\pm$ 0.11 | 0.16     | 0.08 $\pm$ 0.07 | 0.55     |
| Artesunate  | 0.08 $\pm$ 0.08 | 0.21     | 0.11 $\pm$ 0.10 | 0.22     | 0.19 $\pm$ 0.21 | -0.05    |
| Asiatic acid  | 0.04 $\pm$ 0.03 | 0.39     | 0.14 $\pm$ 0.14 | 0.06     | 0.06 $\pm$ 0.05 | 0.61     |
| Astragaloside A                                     | 0.13 $\pm$ 0.02 | 0.36     | 0.11 $\pm$ 0.02 | 0.48     | 0.13 $\pm$ 0.03 | 0.66     |
| Azomycin (2-Nitroimidazole)                         | 0.06 $\pm$ 0.04 | 0.33     | 0.08 $\pm$ 0.07 | 0.34     | 0.04 $\pm$ 0.03 | 0.69     |
| Baicalein   | 0.10 $\pm$ 0.08 | 0.18     | 0.10 $\pm$ 0.09 | 0.25     | 0.09 $\pm$ 0.06 | 0.57     |
| Baicalin  | 0.06 $\pm$ 0.05 | 0.32     | 0.12 $\pm$ 0.11 | 0.18     | 0.08 $\pm$ 0.08 | 0.51     |
| Berberine Hydrochloride                             | 0.07 $\pm$ 0.06 | 0.29     | 0.11 $\pm$ 0.10 | 0.22     | 0.16 $\pm$ 0.17 | 0.14     |
| Bergenin (Cuscutin)                                 | 0.13 $\pm$ 0.10 | 0.09     | 0.15 $\pm$ 0.13 | 0.07     | 0.13 $\pm$ 0.13 | 0.29     |
| Betulinic acid                                      | 0.11 $\pm$ 0.02 | 0.39     | 0.33 $\pm$ 0.03 | 0.27     | 0.12 $\pm$ 0.02 | 0.70     |
| Bilobalide  | 0.09 $\pm$ 0.09 | 0.15     | 0.11 $\pm$ 0.10 | 0.22     | 0.08 $\pm$ 0.08 | 0.51     |
| Biochanin A (4-Methylgenistein)                     | 0.04 $\pm$ 0.01 | 0.46     | 0.11 $\pm$ 0.07 | 0.32     | 0.51 $\pm$ 0.23 | -0.83    |
| Butylscopolamine bromide (Scopolamine butylbromide) | 0.16 $\pm$ 0.06 | 0.19     | 0.18 $\pm$ 0.01 | 0.47     | 0.12 $\pm$ 0.02 | 0.69     |
| Caffeic acid  | 0.14 $\pm$ 0.13 | -0.04    | 0.13 $\pm$ 0.12 | 0.15     | 0.15 $\pm$ 0.13 | 0.28     |
| Caffeic acid phenylethyl ester                      | 0.08 $\pm$ 0.02 | 0.41     | 0.23 $\pm$ 0.05 | 0.30     | 0.11 $\pm$ 0.02 | 0.69     |
| Chlorogenic acid                                    | 0.24 $\pm$ 0.22 | -0.52    | 0.11 $\pm$ 0.08 | 0.29     | 0.12 $\pm$ 0.12 | 0.34     |
| Chrysin   | 0.11 $\pm$ 0.09 | 0.14     | 0.48 $\pm$ 0.75 | -4.05    | 0.06 $\pm$ 0.05 | 0.59     |

|                                     |             |      |             |      |             |       |
|-------------------------------------|-------------|------|-------------|------|-------------|-------|
| Chrysophanic acid (Chrysophanol)    | 0.15 ± 0.03 | 0.32 | 0.15 ± 0.04 | 0.38 | 0.20 ± 0.03 | 0.60  |
| Cinchonidine                        | 0.08 ± 0.02 | 0.41 | 0.24 ± 0.11 | 0.03 | 0.08 ± 0.04 | 0.64  |
| Corosolic acid (CA)                 | 0.03 ± 0.02 | 0.45 | 0.04 ± 0.01 | 0.54 | 0.04 ± 0.02 | 0.72  |
| Cryptotanshinone                    | 0.14 ± 0.03 | 0.32 | 0.07 ± 0.02 | 0.52 | 0.09 ± 0.04 | 0.62  |
| Curcumin                            | 0.03 ± 0.01 | 0.46 | 0.05 ± 0.02 | 0.52 | 0.06 ± 0.02 | 0.71  |
| Curcumol                            | 0.14 ± 0.05 | 0.27 | 0.20 ± 0.04 | 0.34 | 0.22 ± 0.15 | 0.13  |
| Cyclocytidine HCl                   | 0.06 ± 0.04 | 0.35 | 0.07 ± 0.05 | 0.42 | 0.04 ± 0.02 | 0.71  |
| Cyclosporin A (Cyclosporine A)      | 0.20 ± 0.10 | 0.03 | 0.08 ± 0.01 | 0.54 | 0.18 ± 0.04 | 0.60  |
| Cytisine (Baphitoxine, Sophorine)   | 0.15 ± 0.02 | 0.35 | 0.18 ± 0.01 | 0.48 | 0.16 ± 0.08 | 0.46  |
| Dihydroartemisinin (DHA)            | 0.06 ± 0.02 | 0.43 | 0.11 ± 0.05 | 0.40 | 0.09 ± 0.03 | 0.65  |
| Dihydromyricetin (Ampeloptin)       | 0.15 ± 0.07 | 0.17 | 0.18 ± 0.05 | 0.35 | 0.15 ± 0.02 | 0.67  |
| Dioscin (Collettiside III)          | 0.01 ± 0.00 | 0.50 | 0.02 ± 0.00 | 0.59 | 0.03 ± 0.01 | 0.75  |
| Diosmetin (Luteolin 4-methyl ether) | 0.10 ± 0.04 | 0.32 | 0.16 ± 0.03 | 0.42 | 0.22 ± 0.20 | -0.05 |
| Diosmin                             | 0.10 ± 0.01 | 0.42 | 0.20 ± 0.02 | 0.42 | 0.20 ± 0.11 | 0.32  |
| DL-Carnitine hydrochloride          | 0.11 ± 0.05 | 0.27 | 0.10 ± 0.03 | 0.47 | 0.41 ± 0.31 | -0.94 |
| D-Mannitol (Osmitol)                | 0.12 ± 0.02 | 0.37 | 0.23 ± 0.04 | 0.34 | 0.17 ± 0.03 | 0.63  |
| Emodin                              | 0.08 ± 0.02 | 0.40 | 0.18 ± 0.09 | 0.20 | 0.33 ± 0.19 | -0.17 |
| Enoxolone (Glycyrrhetin)            | 0.08 ± 0.03 | 0.37 | 0.15 ± 0.08 | 0.27 | 0.19 ± 0.19 | 0.04  |
| Epi-Corosolic acid (ECA)            | 0.09 ± 0.05 | 0.30 | 0.14 ± 0.02 | 0.48 | 0.21 ± 0.02 | 0.66  |
| Epi-Maslinic acid (EMA)             | 0.05 ± 0.01 | 0.46 | 0.14 ± 0.02 | 0.46 | 0.18 ± 0.03 | 0.62  |
| Epi-Ursolic acid (EUA)              | 0.11 ± 0.03 | 0.34 | 0.11 ± 0.02 | 0.47 | 0.33 ± 0.24 | -0.42 |
| Fisetin (Fustel)                    | 0.09 ± 0.02 | 0.40 | 0.16 ± 0.01 | 0.48 | 0.16 ± 0.05 | 0.55  |
| Formononetin (Formononetol)         | 0.06 ± 0.02 | 0.42 | 0.10 ± 0.04 | 0.43 | 0.23 ± 0.29 | -0.41 |
| Fumalic acid (Ferulic acid)         | 0.12 ± 0.03 | 0.34 | 0.22 ± 0.01 | 0.45 | 0.17 ± 0.07 | 0.48  |
| Gastrodin (Gastrodine)              | 0.16 ± 0.08 | 0.12 | 0.19 ± 0.03 | 0.39 | 0.13 ± 0.01 | 0.71  |
| Genistein                           | 0.12 ± 0.03 | 0.33 | 0.18 ± 0.04 | 0.38 | 0.13 ± 0.05 | 0.58  |
| Glycyrrhizic acid                   | 0.12 ± 0.05 | 0.28 | 0.14 ± 0.02 | 0.47 | 0.09 ± 0.01 | 0.72  |
| Gossypol                            | 0.04 ± 0.01 | 0.47 | 0.21 ± 0.03 | 0.39 | 0.06 ± 0.02 | 0.69  |
| Gramine                             | 0.07 ± 0.03 | 0.37 | 0.13 ± 0.02 | 0.47 | 0.15 ± 0.10 | 0.38  |
| Guanosine                           | 0.09 ± 0.03 | 0.36 | 0.11 ± 0.04 | 0.41 | 0.13 ± 0.03 | 0.66  |
| Gynostemma Extract                  | 0.13 ± 0.04 | 0.30 | 0.10 ± 0.04 | 0.43 | 0.31 ± 0.19 | -0.15 |
| Hematoxylin (Hydroxybrazilin)       | 0.11 ± 0.04 | 0.32 | 0.18 ± 0.03 | 0.43 | 0.08 ± 0.01 | 0.74  |
| Hesperetin                          | 0.12 ± 0.04 | 0.30 | 0.17 ± 0.03 | 0.43 | 0.10 ± 0.03 | 0.67  |
| Hesperidin                          | 0.12 ± 0.03 | 0.34 | 0.20 ± 0.06 | 0.30 | 0.21 ± 0.15 | 0.15  |

|  |             |       |             |      |             |       |
|--|-------------|-------|-------------|------|-------------|-------|
| Honokiol                               | 0.05 ± 0.01 | 0.44  | 0.07 ± 0.01 | 0.54 | 0.18 ± 0.24 | -0.15 |
| Hordenine                              | 0.07 ± 0.02 | 0.39  | 0.15 ± 0.05 | 0.36 | 0.14 ± 0.09 | 0.44  |
| Hyodeoxycholic acid (HDCA)             | 0.29 ± 0.08 | -0.01 | 0.18 ± 0.04 | 0.38 | 0.20 ± 0.10 | 0.37  |
| Hypoxanthine                           | 0.09 ± 0.03 | 0.37  | 0.14 ± 0.03 | 0.44 | 0.16 ± 0.06 | 0.52  |
| Icariin                                | 0.17 ± 0.05 | 0.23  | 0.16 ± 0.04 | 0.37 | 0.24 ± 0.18 | 0.01  |
| Indirubin                              | 0.05 ± 0.01 | 0.46  | 0.12 ± 0.06 | 0.35 | 0.08 ± 0.01 | 0.73  |
| Indole-3-carbinol                      | 0.25 ± 0.06 | 0.09  | 0.23 ± 0.04 | 0.34 | 0.22 ± 0.02 | 0.66  |
| Inosine                                | 0.14 ± 0.06 | 0.22  | 0.19 ± 0.04 | 0.38 | 0.20 ± 0.13 | 0.25  |
| Ipriflavone                            | 0.08 ± 0.02 | 0.41  | 0.12 ± 0.01 | 0.51 | 0.12 ± 0.04 | 0.61  |
| Isoliquiritigenin                      | 0.13 ± 0.04 | 0.29  | 0.20 ± 0.05 | 0.34 | 0.46 ± 0.16 | -0.26 |
| Kaempferol                             | 0.08 ± 0.02 | 0.41  | 0.13 ± 0.02 | 0.47 | 0.12 ± 0.02 | 0.68  |
| Kinetin (6-Furfuryladenine)            | 0.27 ± 0.19 | -0.45 | 0.24 ± 0.04 | 0.33 | 0.17 ± 0.03 | 0.62  |
| L (+)-Rhamnose Monohydrate             | 0.10 ± 0.01 | 0.42  | 0.15 ± 0.02 | 0.47 | 0.14 ± 0.07 | 0.50  |
| Lappaconite Hydrobromide               | 0.18 ± 0.06 | 0.20  | 0.19 ± 0.03 | 0.42 | 0.13 ± 0.02 | 0.69  |
| Limonin                                | 0.16 ± 0.10 | 0.07  | 0.15 ± 0.02 | 0.47 | 0.13 ± 0.03 | 0.63  |
| Luteolin                               | 0.31 ± 0.37 | -1.31 | 0.12 ± 0.04 | 0.43 | 0.18 ± 0.04 | 0.59  |
| Magnolol                               | 0.05 ± 0.01 | 0.46  | 0.09 ± 0.01 | 0.53 | 0.13 ± 0.14 | 0.27  |
| Maslinic acid (MA)                     | 0.04 ± 0.01 | 0.47  | 0.15 ± 0.02 | 0.48 | 0.19 ± 0.02 | 0.66  |
| Matrine ((+)-Matrine)                  | 0.11 ± 0.03 | 0.36  | 0.14 ± 0.03 | 0.45 | 0.30 ± 0.31 | -0.66 |
| Methyl-Hesperidin                      | 0.20 ± 0.16 | -0.20 | 0.35 ± 0.06 | 0.11 | 0.27 ± 0.14 | 0.14  |
| Morin hydrate (Aurantica)              | 0.26 ± 0.04 | 0.16  | 0.17 ± 0.02 | 0.44 | 0.17 ± 0.04 | 0.60  |
| Myricetin (Cannabiscetin)              | 0.14 ± 0.03 | 0.31  | 0.17 ± 0.03 | 0.42 | 0.14 ± 0.04 | 0.61  |
| Myricitrin (Myricitrine)               | 0.09 ± 0.02 | 0.38  | 0.15 ± 0.03 | 0.45 | 0.20 ± 0.19 | 0.03  |
| Nalidixic acid (NegGram)               | 0.15 ± 0.04 | 0.30  | 0.20 ± 0.02 | 0.45 | 0.14 ± 0.04 | 0.60  |
| Naringenin                             | 0.27 ± 0.10 | -0.07 | 0.24 ± 0.05 | 0.27 | 0.14 ± 0.03 | 0.66  |
| Naringin (Naringoside)                 | 0.19 ± 0.05 | 0.22  | 0.19 ± 0.02 | 0.45 | 0.14 ± 0.04 | 0.63  |
| Naringin Dihydrochalcone (Naringin DC) | 0.17 ± 0.05 | 0.21  | 0.24 ± 0.05 | 0.30 | 0.14 ± 0.02 | 0.66  |
| Neohesperidin                          | 0.16 ± 0.11 | 0.03  | 0.15 ± 0.03 | 0.42 | 0.19 ± 0.11 | 0.33  |
| Neohesperidin dihydrochalcone (Nhdc)   | 0.10 ± 0.02 | 0.40  | 0.17 ± 0.04 | 0.38 | 0.13 ± 0.04 | 0.61  |
| Nobiletin (Hexamethoxyflavone)         | 0.08 ± 0.03 | 0.38  | 0.17 ± 0.02 | 0.46 | 0.17 ± 0.04 | 0.61  |
| Oleanolic Acid (Caryophyllin)          | 0.04 ± 0.01 | 0.45  | 0.07 ± 0.02 | 0.52 | 0.10 ± 0.04 | 0.61  |
| Oridonin (Isodonol)                    | 0.05 ± 0.01 | 0.46  | 0.02 ± 0.00 | 0.60 | 0.02 ± 0.00 | 0.77  |
| Orotic acid (6-Carboxyuracil)          | 0.24 ± 0.03 | 0.23  | 0.21 ± 0.01 | 0.45 | 0.15 ± 0.10 | 0.41  |
| Osthole (Osthol)                       | 0.15 ± 0.04 | 0.27  | 0.16 ± 0.05 | 0.34 | 0.32 ± 0.21 | -0.26 |

|                                  |             |       |             |       |             |       |
|----------------------------------|-------------|-------|-------------|-------|-------------|-------|
| Oxymatrine (Matrine N-oxide)     | 0.20 ± 0.07 | 0.14  | 0.21 ± 0.08 | 0.21  | 0.23 ± 0.09 | 0.36  |
| Paeonol (Peonol)                 | 0.22 ± 0.06 | 0.14  | 0.21 ± 0.04 | 0.35  | 0.16 ± 0.04 | 0.62  |
| Palmatine chloride               | 0.24 ± 0.08 | 0.06  | 0.23 ± 0.07 | 0.20  | 0.43 ± 0.04 | 0.43  |
| Parthenolide ((-)-Parthenolide)  | 0.05 ± 0.01 | 0.46  | 0.21 ± 0.01 | 0.45  | 0.15 ± 0.05 | 0.56  |
| Phloretin (Dihydronaringenin)    | 0.25 ± 0.09 | -0.02 | 0.23 ± 0.03 | 0.38  | 0.16 ± 0.04 | 0.59  |
| Phlorizin (Phloridzin)           | 0.20 ± 0.03 | 0.29  | 0.22 ± 0.04 | 0.34  | 0.19 ± 0.07 | 0.48  |
| Piperine (1-Piperoylpiperidine)  | 0.15 ± 0.04 | 0.27  | 0.18 ± 0.03 | 0.39  | 0.16 ± 0.06 | 0.52  |
| Polydatin(Piceid)                | 0.16 ± 0.04 | 0.26  | 0.22 ± 0.05 | 0.29  | 0.16 ± 0.03 | 0.65  |
| Puerarin (Kakonein)              | 0.18 ± 0.03 | 0.29  | 0.21 ± 0.05 | 0.31  | 0.22 ± 0.07 | 0.44  |
| Quercetin (Sophoretin)           | 0.12 ± 0.01 | 0.40  | 0.23 ± 0.03 | 0.39  | 0.15 ± 0.04 | 0.59  |
| Quercetin dihydrate (Sophoretin) | 0.17 ± 0.02 | 0.33  | 0.26 ± 0.02 | 0.40  | 0.24 ± 0.13 | 0.19  |
| Resveratrol                      | 0.15 ± 0.03 | 0.31  | 0.27 ± 0.05 | 0.24  | 0.28 ± 0.23 | -0.25 |
| Rheochrysidin (Physcione)        | 0.08 ± 0.02 | 0.41  | 0.17 ± 0.06 | 0.31  | 0.10 ± 0.02 | 0.68  |
| Rotundine                        | 0.12 ± 0.06 | 0.25  | 0.11 ± 0.02 | 0.49  | 0.09 ± 0.01 | 0.72  |
| Rutaecarpine (Rutecarpine)       | 0.11 ± 0.01 | 0.42  | 0.12 ± 0.01 | 0.50  | 0.29 ± 0.30 | -0.58 |
| Rutin (Rutoside)                 | 0.18 ± 0.03 | 0.28  | 0.23 ± 0.07 | 0.23  | 0.45 ± 0.14 | -0.16 |
| Salicin (Salicoside, Salicine)   | 0.19 ± 0.08 | 0.10  | 0.21 ± 0.03 | 0.39  | 0.15 ± 0.03 | 0.64  |
| Salidroside (Rhodioloside)       | 0.19 ± 0.02 | 0.33  | 0.23 ± 0.07 | 0.23  | 0.14 ± 0.02 | 0.69  |
| Sclareol                         | 0.05 ± 0.01 | 0.45  | 0.13 ± 0.03 | 0.44  | 0.06 ± 0.03 | 0.68  |
| Sclareolide (Norambreinolide)    | 0.07 ± 0.01 | 0.43  | 0.13 ± 0.03 | 0.44  | 0.18 ± 0.24 | -0.13 |
| Sesamin (Fagarol)                | 0.12 ± 0.04 | 0.30  | 0.18 ± 0.04 | 0.38  | 0.23 ± 0.16 | 0.11  |
| Shikimic acid (Shikimate)        | 0.11 ± 0.03 | 0.35  | 0.19 ± 0.03 | 0.40  | 0.12 ± 0.03 | 0.65  |
| Shikonin                         | 0.01 ± 0.00 | 0.50  | 0.01 ± 0.00 | 0.60  | 0.01 ± 0.00 | 0.77  |
| Silibinin (Silybin)              | 0.25 ± 0.11 | -0.08 | 0.20 ± 0.01 | 0.45  | 0.16 ± 0.02 | 0.66  |
| Silymarin (Silybin B)            | 0.22 ± 0.04 | 0.23  | 0.21 ± 0.03 | 0.40  | 0.14 ± 0.04 | 0.61  |
| Sinomenine (Cucoline)            | 0.18 ± 0.03 | 0.28  | 0.23 ± 0.03 | 0.38  | 0.18 ± 0.05 | 0.55  |
| Sodium Danshensu                 | 0.19 ± 0.02 | 0.32  | 0.24 ± 0.06 | 0.25  | 0.19 ± 0.10 | 0.36  |
| Sophocarpine                     | 0.12 ± 0.04 | 0.30  | 0.18 ± 0.03 | 0.40  | 0.14 ± 0.02 | 0.67  |
| Sorbitol (Glucitol)              | 0.16 ± 0.04 | 0.27  | 0.23 ± 0.07 | 0.22  | 0.13 ± 0.03 | 0.65  |
| Synephrine (Oxedrine)            | 0.20 ± 0.06 | 0.18  | 0.38 ± 0.13 | -0.28 | 0.22 ± 0.07 | 0.46  |
| Tangeretin (Tangeritin)          | 0.13 ± 0.06 | 0.22  | 0.24 ± 0.06 | 0.25  | 0.20 ± 0.13 | 0.23  |
| Tanshinone I                     | 0.07 ± 0.01 | 0.43  | 0.09 ± 0.01 | 0.53  | 0.05 ± 0.01 | 0.73  |
| Tanshinone IIA (Tanshinone B)    | 0.34 ± 0.11 | -0.23 | 0.29 ± 0.11 | -0.01 | 0.16 ± 0.08 | 0.47  |
| Taxifolin (Dihydroquercetin)     | 0.26 ± 0.05 | 0.13  | 0.29 ± 0.10 | 0.04  | 0.28 ± 0.07 | 0.43  |

|                                     |             |       |             |      |             |       |
|-------------------------------------|-------------|-------|-------------|------|-------------|-------|
| Tetrahydropapaverine hydrochloride  | 0.27 ± 0.08 | -0.02 | 0.20 ± 0.03 | 0.39 | 0.24 ± 0.08 | 0.40  |
| Tetrandrine (Fanchinine)            | 0.04 ± 0.01 | 0.45  | 0.11 ± 0.06 | 0.36 | 0.23 ± 0.29 | -0.43 |
| Triptolide                          | 0.12 ± 0.02 | 0.38  | 0.20 ± 0.03 | 0.37 | 0.12 ± 0.01 | 0.70  |
| Troxerutin                          | 0.23 ± 0.04 | 0.23  | 0.21 ± 0.02 | 0.43 | 0.14 ± 0.05 | 0.59  |
| Ursolic acid (Malol)                | 0.07 ± 0.10 | 0.14  | 0.03 ± 0.01 | 0.57 | 0.03 ± 0.00 | 0.76  |
| Vanillin                            | 0.09 ± 0.02 | 0.40  | 0.18 ± 0.02 | 0.44 | 0.11 ± 0.02 | 0.67  |
| Vanillylacetone                     | 0.21 ± 0.03 | 0.26  | 0.23 ± 0.03 | 0.37 | 0.17 ± 0.05 | 0.55  |
| Xanthone (Genicide)                 | 0.12 ± 0.03 | 0.34  | 0.19 ± 0.02 | 0.45 | 0.13 ± 0.02 | 0.68  |
| Yohimbine hydrochloride (Antagonil) | 0.16 ± 0.03 | 0.30  | 0.23 ± 0.03 | 0.37 | 0.13 ± 0.03 | 0.66  |
| β-Sitosterol                        | 0.12 ± 0.10 | 0.09  | 0.13 ± 0.12 | 0.14 | 0.09 ± 0.09 | 0.46  |

**Supplementary Table 3.** ATP bioluminescence values (normalized to control; mean  $\pm$  standard deviation of 4 replicates) and z-factor in DU145, PC3 and C4-2B human PCa cells treated with UA in combination with each of the natural compounds listed at 20  $\mu$ M for 12 hours.

|   | DU145           |          | PC3             |          | C4-2B           |          |
|---|-----------------|----------|-----------------|----------|-----------------|----------|
|   | ATP             | z-factor | ATP             | z-factor | ATP             | z-factor |
| (-)-Epigallocatechin gallate                        | 0.60 $\pm$ 0.11 | -0.33    | 0.58 $\pm$ 0.18 | -1.78    | 0.31 $\pm$ 0.27 | -0.76    |
| (+)-Usniacin (D-Usnic acid)                         | 0.28 $\pm$ 0.15 | 0.10     | 0.82 $\pm$ 0.07 | -3.53    | 0.13 $\pm$ 0.10 | 0.18     |
| 10-Hydroxycamptothecin                              | 0.89 $\pm$ 0.21 | -6.47    | 0.81 $\pm$ 0.10 | -3.76    | 0.36 $\pm$ 0.02 | 0.27     |
| 3-Indolebutyric acid (IBA)                          | 0.65 $\pm$ 0.06 | -0.14    | 0.80 $\pm$ 0.23 | -5.40    | 0.39 $\pm$ 0.32 | -1.21    |
| 4-Methylumbelliferon (4-MU)                         | 0.69 $\pm$ 0.21 | -1.71    | 0.89 $\pm$ 0.22 | -10.53   | 0.30 $\pm$ 0.26 | -0.68    |
| 5-hydroxytryptophan (5-HTP)                         | 0.70 $\pm$ 0.09 | -0.60    | 0.91 $\pm$ 0.19 | -11.62   | 0.52 $\pm$ 0.09 | -0.42    |
| Aesculin (Esculin)                                  | 0.59 $\pm$ 0.17 | -0.74    | 0.60 $\pm$ 0.42 | -3.67    | 0.21 $\pm$ 0.20 | -0.28    |
| Aloin (Barbaloin)                                   | 0.77 $\pm$ 0.08 | -0.98    | 0.84 $\pm$ 0.23 | -7.24    | 0.73 $\pm$ 0.15 | -2.08    |
| Ammonium Glycyrrhizinate (AMGZ)                     | 0.92 $\pm$ 0.10 | -5.49    | 0.93 $\pm$ 0.17 | -14.84   | 0.68 $\pm$ 0.14 | -1.57    |
| Amygdalin   | 0.04 $\pm$ 0.02 | 0.73     | 0.05 $\pm$ 0.01 | 0.34     | 0.06 $\pm$ 0.05 | 0.42     |
| Andrographolide                                     | 0.80 $\pm$ 0.24 | -3.66    | 0.34 $\pm$ 0.32 | -1.36    | 0.30 $\pm$ 0.27 | -0.71    |
| Apigenin  | 0.81 $\pm$ 0.28 | -4.53    | 1.34 $\pm$ 0.02 | -1.00    | 0.32 $\pm$ 0.21 | -0.53    |
| Apocynin (Acetovanillone)                           | 0.89 $\pm$ 0.25 | -8.07    | 0.81 $\pm$ 0.04 | -2.78    | 0.46 $\pm$ 0.06 | -0.04    |
| Arbutin (Uva, p-Arbutin)                            | 0.98 $\pm$ 0.19 | -32.79   | 0.78 $\pm$ 0.42 | -7.46    | 0.37 $\pm$ 0.33 | -1.19    |
| Artesunate  | 0.74 $\pm$ 0.29 | -3.15    | 1.01 $\pm$ 0.25 | -137.41  | 0.26 $\pm$ 0.21 | -0.39    |
| Asiatic acid  | 0.35 $\pm$ 0.24 | -0.41    | 0.31 $\pm$ 0.22 | -0.80    | 0.12 $\pm$ 0.09 | 0.23     |
| Astragaloside A                                     | 0.89 $\pm$ 0.29 | -8.90    | 0.90 $\pm$ 0.10 | -7.46    | 0.42 $\pm$ 0.06 | -0.01    |
| Azomycin (2-Nitroimidazole)                         | 0.81 $\pm$ 0.43 | -6.95    | 1.15 $\pm$ 0.19 | -7.15    | 0.29 $\pm$ 0.26 | -0.65    |
| Baicalein   | 0.89 $\pm$ 0.20 | -6.30    | 0.81 $\pm$ 0.38 | -8.34    | 0.30 $\pm$ 0.26 | -0.66    |
| Baicalin  | 0.83 $\pm$ 0.37 | -6.78    | 1.18 $\pm$ 0.06 | -3.42    | 0.29 $\pm$ 0.26 | -0.67    |
| Berberine Hydrochloride                             | 1.10 $\pm$ 0.35 | -11.94   | 0.98 $\pm$ 0.07 | -31.23   | 0.29 $\pm$ 0.24 | -0.56    |
| Bergenin (Cuscutin)                                 | 0.93 $\pm$ 0.41 | -20.54   | 0.79 $\pm$ 0.33 | -6.60    | 0.51 $\pm$ 0.27 | -1.45    |
| Betulinic acid                                      | 0.12 $\pm$ 0.03 | 0.65     | 0.20 $\pm$ 0.09 | -0.07    | 0.37 $\pm$ 0.05 | 0.14     |
| Bilobalide  | 1.04 $\pm$ 0.56 | -50.05   | 1.27 $\pm$ 0.17 | -3.06    | 0.35 $\pm$ 0.22 | -0.60    |
| Biochanin A (4-Methylgenistein)                     | 0.59 $\pm$ 0.06 | 0.02     | 0.47 $\pm$ 0.14 | -0.94    | 0.48 $\pm$ 0.11 | -0.40    |
| Butylscopolamine bromide (Scopolamine butylbromide) | 0.81 $\pm$ 0.05 | -0.85    | 0.53 $\pm$ 0.12 | -1.00    | 0.47 $\pm$ 0.09 | -0.23    |
| Caffeic acid  | 1.20 $\pm$ 0.59 | -8.73    | 0.92 $\pm$ 0.42 | -23.31   | 0.44 $\pm$ 0.23 | -0.98    |
| Caffeic acid phenylethyl ester                      | 0.08 $\pm$ 0.00 | 0.76     | 0.11 $\pm$ 0.03 | 0.23     | 0.39 $\pm$ 0.09 | -0.12    |
| Chlorogenic acid                                    | 1.12 $\pm$ 0.38 | -10.43   | 1.21 $\pm$ 0.17 | -4.23    | 0.31 $\pm$ 0.16 | -0.27    |
| Chrysin   | 1.34 $\pm$ 0.32 | -2.45    | 0.77 $\pm$ 0.44 | -7.49    | 0.60 $\pm$ 0.21 | -1.61    |

|                                     |      |   |      |         |      |   |      |         |      |   |      |       |
|-------------------------------------|------|---|------|---------|------|---|------|---------|------|---|------|-------|
| Chrysophanic acid (Chrysophanol)    | 0.90 | ± | 0.30 | -10.68  | 1.01 | ± | 0.11 | -77.75  | 0.64 | ± | 0.09 | -0.86 |
| Cinchonidine                        | 0.63 | ± | 0.12 | -0.59   | 0.85 | ± | 0.20 | -6.71   | 0.34 | ± | 0.02 | 0.33  |
| Corosolic acid (CA)                 | 0.11 | ± | 0.03 | 0.68    | 0.12 | ± | 0.08 | 0.06    | 0.11 | ± | 0.03 | 0.45  |
| Cryptotanshinone                    | 0.12 | ± | 0.01 | 0.71    | 0.28 | ± | 0.06 | -0.08   | 0.13 | ± | 0.01 | 0.50  |
| Curcumin                            | 0.10 | ± | 0.02 | 0.70    | 0.20 | ± | 0.11 | -0.16   | 0.25 | ± | 0.11 | 0.05  |
| Curcumol                            | 0.49 | ± | 0.06 | 0.24    | 0.40 | ± | 0.08 | -0.40   | 0.38 | ± | 0.14 | -0.33 |
| Cyclocytidine HCl                   | 0.52 | ± | 0.25 | -1.04   | 0.71 | ± | 0.08 | -1.89   | 0.19 | ± | 0.18 | -0.17 |
| Cyclosporin A (Cyclosporine A)      | 0.68 | ± | 0.14 | -0.96   | 0.64 | ± | 0.17 | -2.12   | 0.19 | ± | 0.05 | 0.32  |
| Cytisine (Baphitoxine, Sophorine)   | 0.84 | ± | 0.18 | -3.84   | 0.77 | ± | 0.12 | -3.20   | 0.59 | ± | 0.12 | -0.84 |
| Dihydroartemisinin (DHA)            | 0.74 | ± | 0.10 | -0.98   | 0.77 | ± | 0.20 | -4.07   | 0.30 | ± | 0.08 | 0.09  |
| Dihydromyricetin (Ampeloptin)       | 0.58 | ± | 0.06 | 0.06    | 0.68 | ± | 0.20 | -2.80   | 0.52 | ± | 0.19 | -1.06 |
| Dioscin (Collettiside III)          | 0.03 | ± | 0.00 | 0.77    | 0.03 | ± | 0.00 | 0.37    | 0.05 | ± | 0.01 | 0.57  |
| Diosmetin (Luteolin 4-methyl ether) | 0.99 | ± | 0.04 | -41.57  | 0.88 | ± | 0.22 | -9.05   | 0.58 | ± | 0.13 | -0.89 |
| Diosmin                             | 0.88 | ± | 0.16 | -4.70   | 0.84 | ± | 0.20 | -6.46   | 0.54 | ± | 0.05 | -0.17 |
| DL-Carnitine hydrochloride          | 0.84 | ± | 0.08 | -1.72   | 0.92 | ± | 0.10 | -10.04  | 0.34 | ± | 0.08 | 0.04  |
| D-Mannitol (Osmitol)                | 0.87 | ± | 0.09 | -2.88   | 0.76 | ± | 0.17 | -3.55   | 0.85 | ± | 0.36 | -8.80 |
| Emodin                              | 0.50 | ± | 0.08 | 0.14    | 0.55 | ± | 0.12 | -1.13   | 0.41 | ± | 0.05 | 0.05  |
| Enoxolone (Glycyrrhetin)            | 0.74 | ± | 0.07 | -0.54   | 1.01 | ± | 0.14 | -112.42 | 0.35 | ± | 0.08 | 0.04  |
| Epi-Corosolic acid (ECA)            | 0.59 | ± | 0.07 | -0.06   | 0.51 | ± | 0.07 | -0.65   | 0.56 | ± | 0.11 | -0.65 |
| Epi-Maslinic acid (EMA)             | 0.42 | ± | 0.12 | 0.03    | 0.39 | ± | 0.11 | -0.52   | 0.44 | ± | 0.09 | -0.19 |
| Epi-Ursolic acid (EUA)              | 0.57 | ± | 0.10 | -0.20   | 0.64 | ± | 0.25 | -2.75   | 0.51 | ± | 0.10 | -0.44 |
| Fisetin (Fustel)                    | 1.10 | ± | 0.15 | -5.45   | 1.08 | ± | 0.09 | -10.29  | 0.56 | ± | 0.10 | -0.56 |
| Formononetin (Formononetol)         | 0.87 | ± | 0.08 | -2.45   | 1.00 | ± | 0.19 | -392.35 | 0.35 | ± | 0.12 | -0.14 |
| Fumalic acid (Ferulic acid)         | 1.22 | ± | 0.44 | -6.07   | 1.01 | ± | 0.09 | -107.62 | 0.56 | ± | 0.11 | -0.65 |
| Gastrodin (Gastrodine)              | 0.90 | ± | 0.05 | -2.72   | 0.91 | ± | 0.15 | -10.22  | 0.56 | ± | 0.15 | -0.94 |
| Genistein                           | 0.69 | ± | 0.14 | -1.07   | 0.92 | ± | 0.21 | -14.89  | 0.38 | ± | 0.13 | -0.29 |
| Glycyrrhizic acid                   | 1.18 | ± | 0.35 | -5.98   | 1.08 | ± | 0.16 | -12.58  | 0.49 | ± | 0.11 | -0.41 |
| Gossypol                            | 0.57 | ± | 0.48 | -2.83   | 0.20 | ± | 0.03 | 0.14    | 0.15 | ± | 0.06 | 0.33  |
| Gramine                             | 1.00 | ± | 0.33 | -252.82 | 0.96 | ± | 0.16 | -27.11  | 0.40 | ± | 0.12 | -0.25 |
| Guanosine                           | 0.92 | ± | 0.26 | -11.19  | 0.77 | ± | 0.10 | -2.81   | 0.41 | ± | 0.05 | 0.06  |
| Gynostemma Extract                  | 1.29 | ± | 0.47 | -4.57   | 1.01 | ± | 0.15 | -71.20  | 0.49 | ± | 0.05 | -0.06 |
| Hematoxylin (Hydroxybrazilin)       | 0.76 | ± | 0.07 | -0.73   | 0.58 | ± | 0.11 | -1.25   | 0.61 | ± | 0.16 | -1.23 |
| Hesperetin                          | 1.24 | ± | 0.25 | -3.03   | 1.22 | ± | 0.20 | -4.38   | 0.52 | ± | 0.16 | -0.82 |
| Hesperidin                          | 1.37 | ± | 0.43 | -3.00   | 1.21 | ± | 0.10 | -3.17   | 0.48 | ± | 0.12 | -0.45 |

|  |             |         |             |         |             |        |
|--|-------------|---------|-------------|---------|-------------|--------|
| Honokiol                               | 0.74 ± 0.76 | -8.42   | 0.13 ± 0.03 | 0.22    | 0.17 ± 0.02 | 0.44   |
| Hordenine                              | 0.80 ± 0.06 | -0.96   | 0.91 ± 0.11 | -9.72   | 0.43 ± 0.07 | -0.05  |
| Hyodeoxycholic acid (HDCA)             | 1.55 ± 0.38 | -1.43   | 1.26 ± 0.16 | -3.09   | 0.62 ± 0.14 | -1.19  |
| Hypoxanthine                           | 0.93 ± 0.10 | -6.59   | 0.65 ± 0.09 | -1.45   | 0.26 ± 0.08 | 0.15   |
| Icariin                                | 1.57 ± 0.32 | -1.07   | 0.97 ± 0.08 | -30.71  | 0.54 ± 0.14 | -0.81  |
| Indirubin                              | 0.57 ± 0.05 | 0.14    | 0.37 ± 0.04 | -0.14   | 0.36 ± 0.04 | 0.19   |
| Indole-3-carbinol                      | 1.39 ± 0.39 | -2.51   | 1.32 ± 0.15 | -2.30   | 0.64 ± 0.08 | -0.80  |
| Inosine                                | 1.13 ± 0.08 | -2.52   | 0.86 ± 0.10 | -5.47   | 0.49 ± 0.32 | -1.64  |
| Ipriflavone                            | 0.34 ± 0.02 | 0.57    | 0.36 ± 0.07 | -0.26   | 0.34 ± 0.12 | -0.14  |
| Isoliquiritigenin                      | 0.86 ± 0.35 | -8.30   | 0.71 ± 0.17 | -2.81   | 0.48 ± 0.05 | -0.03  |
| Kaempferol                             | 0.88 ± 0.33 | -9.00   | 0.96 ± 0.06 | -20.96  | 0.59 ± 0.22 | -1.57  |
| Kinetin (6-Furfuryladenine)            | 0.95 ± 0.16 | -12.92  | 0.95 ± 0.19 | -20.89  | 0.59 ± 0.05 | -0.33  |
| L (+)-Rhamnose Monohydrate             | 0.77 ± 0.28 | -3.56   | 0.87 ± 0.06 | -5.05   | 0.62 ± 0.15 | -1.23  |
| Lappaconite Hydrobromide               | 0.82 ± 0.10 | -1.87   | 0.89 ± 0.18 | -9.12   | 0.53 ± 0.04 | -0.12  |
| Limonin                                | 0.98 ± 0.18 | -44.06  | 1.00 ± 0.26 | -312.72 | 0.51 ± 0.08 | -0.34  |
| Luteolin                               | 0.89 ± 0.29 | -8.87   | 1.15 ± 0.17 | -6.40   | 0.80 ± 0.38 | -6.63  |
| Magnolol                               | 0.10 ± 0.02 | 0.72    | 0.09 ± 0.01 | 0.31    | 0.21 ± 0.04 | 0.36   |
| Maslinic acid (MA)                     | 0.10 ± 0.03 | 0.67    | 0.15 ± 0.09 | -0.01   | 0.14 ± 0.04 | 0.40   |
| Matrine ((+)-Matrine)                  | 0.77 ± 0.14 | -1.73   | 0.80 ± 0.08 | -3.15   | 0.58 ± 0.20 | -1.37  |
| Methyl-Hesperidin                      | 1.00 ± 0.16 | -161.79 | 0.99 ± 0.22 | -108.74 | 0.57 ± 0.10 | -0.63  |
| Morin hydrate (Aurantica)              | 0.94 ± 0.13 | -9.31   | 0.99 ± 0.04 | -55.40  | 0.88 ± 0.33 | -10.19 |
| Myricetin (Cannabiscetin)              | 0.97 ± 0.16 | -25.02  | 0.96 ± 0.22 | -29.05  | 0.47 ± 0.03 | 0.11   |
| Myricitrin (Myricitrine)               | 0.88 ± 0.09 | -3.03   | 0.91 ± 0.10 | -9.39   | 0.75 ± 0.34 | -4.73  |
| Nalidixic acid (NegGram)               | 1.14 ± 0.31 | -7.08   | 1.05 ± 0.18 | -21.97  | 0.62 ± 0.04 | -0.42  |
| Naringenin                             | 0.55 ± 0.11 | -0.17   | 0.74 ± 0.17 | -3.22   | 0.50 ± 0.12 | -0.51  |
| Naringin (Naringoside)                 | 0.91 ± 0.08 | -3.89   | 0.92 ± 0.10 | -10.65  | 0.75 ± 0.29 | -4.07  |
| Naringin Dihydrochalcone (Naringin DC) | 1.04 ± 0.15 | -15.93  | 0.75 ± 0.25 | -4.53   | 0.94 ± 0.37 | -22.59 |
| Neohesperidin                          | 0.95 ± 0.04 | -5.29   | 1.03 ± 0.13 | -29.77  | 0.86 ± 0.29 | -7.89  |
| Neohesperidin dihydrochalcone (Nhdc)   | 1.23 ± 0.30 | -3.72   | 1.06 ± 0.18 | -17.48  | 0.57 ± 0.03 | -0.16  |
| Nobiletin (Hexamethoxyflavone)         | 1.26 ± 0.39 | -4.30   | 1.01 ± 0.14 | -121.76 | 0.58 ± 0.15 | -1.00  |
| Oleanolic Acid (Caryophyllin)          | 0.84 ± 0.08 | -1.83   | 0.78 ± 0.19 | -4.32   | 0.38 ± 0.16 | -0.44  |
| Oridonin (Isodonol)                    | 1.69 ± 0.35 | -0.81   | 0.87 ± 0.05 | -4.98   | 0.21 ± 0.07 | 0.24   |
| Orotic acid (6-Carboxyuracil)          | 1.06 ± 0.06 | -5.64   | 1.17 ± 0.19 | -5.72   | 0.87 ± 0.28 | -8.41  |
| Osthole (Osthol)                       | 1.41 ± 0.35 | -2.09   | 0.86 ± 0.13 | -5.94   | 0.78 ± 0.26 | -4.42  |

|                                  |      |   |      |        |      |   |      |         |      |   |      |         |
|----------------------------------|------|---|------|--------|------|---|------|---------|------|---|------|---------|
| Oxymatrine (Matrine N-oxide)     | 0.97 | ± | 0.12 | -15.60 | 1.00 | ± | 0.08 | -177.57 | 1.15 | ± | 0.53 | -12.64  |
| Paeonol (Peonol)                 | 1.57 | ± | 0.14 | -0.12  | 1.08 | ± | 0.08 | -9.66   | 0.74 | ± | 0.55 | -7.06   |
| Palmatine chloride               | 0.78 | ± | 0.30 | -4.12  | 0.90 | ± | 0.31 | -13.93  | 0.68 | ± | 0.06 | -0.80   |
| Parthenolide ((-)-Parthenolide)  | 0.34 | ± | 0.08 | 0.30   | 0.40 | ± | 0.10 | -0.47   | 0.20 | ± | 0.04 | 0.34    |
| Phloretin (Dihydronaringenin)    | 0.92 | ± | 0.23 | -9.91  | 1.06 | ± | 0.31 | -23.14  | 0.65 | ± | 0.17 | -1.60   |
| Phlorizin (Phloridzin)           | 0.79 | ± | 0.12 | -1.68  | 1.07 | ± | 0.12 | -12.90  | 0.75 | ± | 0.27 | -3.93   |
| Piperine (1-Piperoylpiperidine)  | 0.83 | ± | 0.24 | -4.50  | 1.05 | ± | 0.18 | -23.92  | 0.67 | ± | 0.26 | -2.57   |
| Polydatin(Piceid)                | 1.12 | ± | 0.14 | -4.04  | 1.11 | ± | 0.25 | -10.82  | 0.51 | ± | 0.06 | -0.18   |
| Puerarin (Kakonein)              | 0.78 | ± | 0.16 | -2.15  | 1.20 | ± | 0.12 | -3.76   | 0.71 | ± | 0.28 | -3.23   |
| Quercetin (Sophoretin)           | 1.31 | ± | 0.28 | -2.37  | 0.73 | ± | 0.15 | -3.00   | 0.86 | ± | 0.36 | -9.64   |
| Quercetin dihydrate (Sophoretin) | 0.95 | ± | 0.18 | -15.54 | 1.10 | ± | 0.24 | -12.38  | 0.67 | ± | 0.16 | -1.66   |
| Resveratrol                      | 1.05 | ± | 0.29 | -22.09 | 0.94 | ± | 0.20 | -20.47  | 0.70 | ± | 0.09 | -1.23   |
| Rheochrysidin (Physcione)        | 0.60 | ± | 0.28 | -1.61  | 0.63 | ± | 0.25 | -2.63   | 0.33 | ± | 0.01 | 0.36    |
| Rotundine                        | 0.75 | ± | 0.08 | -0.86  | 0.99 | ± | 0.41 | -191.41 | 0.34 | ± | 0.15 | -0.30   |
| Rutaecarpine (Rutecarpine)       | 0.19 | ± | 0.04 | 0.60   | 0.47 | ± | 0.35 | -2.10   | 0.40 | ± | 0.26 | -0.97   |
| Rutin (Rutoside)                 | 0.94 | ± | 0.20 | -12.60 | 0.96 | ± | 0.20 | -31.21  | 0.63 | ± | 0.16 | -1.42   |
| Salicin (Salicoside, Salicine)   | 0.88 | ± | 0.14 | -4.22  | 0.99 | ± | 0.29 | -237.97 | 0.68 | ± | 0.19 | -1.99   |
| Salidroside (Rhodioloside)       | 0.52 | ± | 0.08 | 0.08   | 0.88 | ± | 0.25 | -10.37  | 0.52 | ± | 0.17 | -0.86   |
| Sclareol                         | 0.08 | ± | 0.02 | 0.72   | 0.11 | ± | 0.01 | 0.30    | 0.23 | ± | 0.09 | 0.13    |
| Sclareolide (Norambreinolide)    | 0.15 | ± | 0.04 | 0.61   | 0.35 | ± | 0.15 | -0.62   | 0.58 | ± | 0.32 | -2.23   |
| Sesamin (Fagarol)                | 0.94 | ± | 0.25 | -15.54 | 0.93 | ± | 0.17 | -14.41  | 0.75 | ± | 0.14 | -2.25   |
| Shikimic acid (Shikimate)        | 1.03 | ± | 0.12 | -20.28 | 0.99 | ± | 0.17 | -89.88  | 0.84 | ± | 0.30 | -6.91   |
| Shikonin                         | 0.01 | ± | 0.00 | 0.78   | 0.04 | ± | 0.01 | 0.33    | 0.02 | ± | 0.01 | 0.58    |
| Silibinin (Silybin)              | 0.90 | ± | 0.05 | -2.53  | 1.12 | ± | 0.33 | -12.00  | 0.98 | ± | 0.40 | -72.57  |
| Silymarin (Silybin B)            | 1.03 | ± | 0.18 | -26.66 | 1.10 | ± | 0.20 | -11.11  | 0.89 | ± | 0.27 | -9.66   |
| Sinomenine (Cucoline)            | 0.96 | ± | 0.10 | -11.01 | 1.11 | ± | 0.25 | -11.59  | 0.81 | ± | 0.35 | -6.55   |
| Sodium Danshensu                 | 0.83 | ± | 0.31 | -5.76  | 0.93 | ± | 0.21 | -15.45  | 0.65 | ± | 0.03 | -0.44   |
| Sophocarpine                     | 0.81 | ± | 0.05 | -0.95  | 0.65 | ± | 0.28 | -3.17   | 0.39 | ± | 0.14 | -0.33   |
| Sorbitol (Glucitol)              | 1.23 | ± | 0.32 | -4.01  | 0.70 | ± | 0.09 | -1.87   | 0.96 | ± | 0.73 | -69.12  |
| Synephrine (Oxedrine)            | 1.01 | ± | 0.20 | -61.43 | 1.08 | ± | 0.17 | -13.44  | 0.83 | ± | 0.61 | -12.16  |
| Tangeretin (Tangeritin)          | 0.87 | ± | 0.13 | -3.69  | 1.02 | ± | 0.40 | -87.37  | 0.83 | ± | 0.30 | -6.62   |
| Tanshinone I                     | 0.71 | ± | 0.14 | -1.13  | 0.61 | ± | 0.19 | -2.04   | 0.27 | ± | 0.03 | 0.33    |
| Tanshinone IIA (Tanshinone B)    | 0.40 | ± | 0.10 | 0.14   | 0.85 | ± | 0.38 | -10.62  | 0.51 | ± | 0.11 | -0.49   |
| Taxifolin (Dihydroquercetin)     | 1.13 | ± | 0.13 | -3.64  | 0.98 | ± | 0.14 | -45.82  | 0.99 | ± | 0.30 | -193.18 |

|                                     |             |        |             |        |             |        |
|-------------------------------------|-------------|--------|-------------|--------|-------------|--------|
| Tetrahydropapaverine hydrochloride  | 1.02 ± 0.15 | -27.31 | 1.07 ± 0.31 | -22.39 | 0.93 ± 0.51 | -28.41 |
| Tetrandrine (Fanchinine)            | 0.36 ± 0.10 | 0.21   | 0.26 ± 0.10 | -0.21  | 0.17 ± 0.03 | 0.42   |
| Triptolide                          | 1.06 ± 0.09 | -6.72  | 0.92 ± 0.10 | -10.39 | 0.62 ± 0.28 | -2.28  |
| Troxerutin                          | 1.15 ± 0.31 | -6.48  | 1.02 ± 0.20 | -53.06 | 1.03 ± 0.62 | -82.38 |
| Ursolic acid (Malol)                | 0.31 ± 0.10 | 0.26   | 0.57 ± 0.43 | -3.42  | 0.07 ± 0.02 | 0.52   |
| Vanillin                            | 1.12 ± 0.24 | -6.98  | 0.87 ± 0.13 | -6.66  | 0.53 ± 0.08 | -0.34  |
| Vanillylacetone                     | 0.83 ± 0.11 | -2.26  | 0.93 ± 0.21 | -17.61 | 0.81 ± 0.17 | -3.74  |
| Xanthone (Genicide)                 | 0.58 ± 0.13 | -0.43  | 0.92 ± 0.19 | -13.00 | 0.57 ± 0.07 | -0.43  |
| Yohimbine hydrochloride (Antagonil) | 0.76 ± 0.09 | -1.00  | 0.89 ± 0.21 | -9.98  | 0.75 ± 0.14 | -2.19  |
| β-Sitosterol                        | 1.10 ± 0.56 | -17.49 | 0.93 ± 0.43 | -24.53 | 0.45 ± 0.25 | -1.08  |

**Supplementary Table 4.** Fold change (first row) and p-value (italic on second row) of intracellular lipids (grouped by sub-class) following treatment with CUR, UA and RES, either alone or in combination of 2 compounds (compared to control). The total concentration of all lipids in each sub-class was used for calculation of fold change and p-values. Statistical significance is based on student t-test with p<0.05 being significant.

| Lipid subclass                | Lipid class               | CUR                      | UA                       | RES                      | CUR+UA                   | RES+UA                   | CUR+RES                  | Number of lipids |
|-------------------------------|---------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|------------------|
| ceramide (Cer)                | sphingolipids (SP)        | 1.19<br><i>1.72E-01</i>  | 2.48<br><i>6.79E-07</i>  | 1.99<br><i>2.28E-02</i>  | 5.95<br><i>4.47E-02</i>  | 3.02<br><i>4.01E-03</i>  | 1.04<br><i>7.59E-01</i>  | 22               |
| cardiolipin (CL)              | glycerophospholipids (GP) | -1.06<br><i>6.14E-01</i> | 1.22<br><i>1.90E-01</i>  | -1.10<br><i>6.02E-01</i> | 3.26<br><i>1.41E-02</i>  | 1.78<br><i>5.51E-02</i>  | 1.13<br><i>2.80E-01</i>  | 3                |
| diacylglycerol (DG)           | glycerolipids (GL)        | 1.14<br><i>8.54E-02</i>  | 1.24<br><i>1.82E-03</i>  | 1.51<br><i>3.42E-02</i>  | 4.16<br><i>2.88E-01</i>  | 1.55<br><i>4.67E-02</i>  | 1.01<br><i>8.59E-01</i>  | 32               |
| glucosylceramide (GlcCer)     | sphingolipids (SP)        | -1.08<br><i>3.11E-01</i> | 2.63<br><i>2.89E-06</i>  | 1.04<br><i>7.50E-01</i>  | 3.76<br><i>6.33E-03</i>  | 2.70<br><i>1.20E-04</i>  | -1.14<br><i>1.71E-01</i> | 7                |
| phosphatidic acid (PA)        | glycerophospholipids (GP) | 1.02<br><i>4.81E-01</i>  | 1.03<br><i>1.99E-01</i>  | -1.01<br><i>6.23E-01</i> | 1.21<br><i>6.49E-02</i>  | 1.04<br><i>2.06E-01</i>  | -1.03<br><i>2.40E-01</i> | 30               |
| phosphatidylcholine (PC)      | glycerophospholipids (GP) | 1.02<br><i>3.77E-01</i>  | 1.11<br><i>2.71E-03</i>  | 1.04<br><i>6.52E-02</i>  | 1.18<br><i>2.49E-02</i>  | 1.08<br><i>1.65E-02</i>  | 1.04<br><i>1.64E-01</i>  | 279              |
| phosphatidylethanolamine (PE) | glycerophospholipids (GP) | -1.11<br><i>8.56E-02</i> | -1.22<br><i>1.49E-03</i> | -1.20<br><i>2.24E-03</i> | -1.22<br><i>2.35E-03</i> | -1.27<br><i>4.43E-03</i> | -1.06<br><i>2.19E-01</i> | 58               |
| phosphatidylglycerol (PG)     | glycerophospholipids (GP) | -1.06<br><i>1.97E-01</i> | -1.18<br><i>6.64E-04</i> | -1.12<br><i>7.79E-03</i> | -1.25<br><i>2.14E-04</i> | -1.26<br><i>6.38E-04</i> | -1.03<br><i>3.99E-01</i> | 45               |
| phosphatidylinositol (PI)     | glycerophospholipids (GP) | -1.04<br><i>7.57E-01</i> | 1.38<br><i>3.15E-02</i>  | -1.28<br><i>1.41E-01</i> | 1.75<br><i>1.76E-02</i>  | 1.35<br><i>6.63E-02</i>  | -1.22<br><i>2.62E-01</i> | 42               |
| phosphatidylserine (PS)       | glycerophospholipids (GP) | -1.02<br><i>6.15E-01</i> | 1.15<br><i>2.21E-02</i>  | -1.01<br><i>7.95E-01</i> | 1.03<br><i>4.18E-01</i>  | 1.07<br><i>2.47E-01</i>  | -1.01<br><i>8.52E-01</i> | 91               |
| sphingomyelin (SM)            | sphingolipids (SP)        | -1.02<br><i>4.46E-01</i> | -1.32<br><i>3.35E-04</i> | -1.04<br><i>3.81E-01</i> | -1.16<br><i>1.55E-02</i> | -1.35<br><i>8.36E-05</i> | -1.11<br><i>1.19E-02</i> | 20               |
| triglyceride (TG)             | glycerolipids (GL)        | -1.02<br><i>4.60E-01</i> | -1.24<br><i>5.08E-04</i> | -1.03<br><i>4.57E-01</i> | -1.14<br><i>8.99E-03</i> | -1.28<br><i>6.66E-05</i> | -1.09<br><i>8.34E-03</i> | 36               |