

Table S1. Details of qualified compounds in various herbs.

| PubChem ID | Ingredients                                                | SwissADME |          |       |       |      |        |
|------------|------------------------------------------------------------|-----------|----------|-------|-------|------|--------|
|            |                                                            | GA        | DL       |       |       |      |        |
|            |                                                            |           | lipinski | ghose | veber | egan | muegge |
| 5280343    | Quercetin                                                  | high      | ✓        | ✓     | ✓     | ✓    | ✓      |
| 72         | Protocatechuic Acid                                        | high      | ✓        |       | ✓     | ✓    |        |
| 985        | Cetylic Acid                                               | high      | ✓        | ✓     |       | ✓    |        |
| 689043     | Caffeic Acid                                               | high      | ✓        | ✓     | ✓     | ✓    |        |
| 5321250    | Senkyunolide G                                             | high      | ✓        | ✓     | ✓     | ✓    | ✓      |
| 15138552   | Senkyunolide N                                             | high      | ✓        | ✓     | ✓     | ✓    | ✓      |
| 91726743   | Senkyunone                                                 | high      | ✓        |       | ✓     | ✓    |        |
| 92231      | Spathulenol                                                | high      | ✓        | ✓     | ✓     | ✓    |        |
| 1174       | Uracil                                                     | high      | ✓        |       | ✓     | ✓    |        |
| 1183       | Vanillin                                                   | high      | ✓        |       | ✓     | ✓    |        |
| 122736     | Wallichilide                                               | high      | ✓        |       | ✓     | ✓    | ✓      |
| 522266     | Spathulenol                                                | high      | ✓        | ✓     | ✓     | ✓    |        |
| 10288      | Chrysophanic Acid                                          | high      | ✓        | ✓     | ✓     | ✓    | ✓      |
| 10208      | Chrysophanol                                               | high      | ✓        | ✓     | ✓     | ✓    | ✓      |
| 14900      | Dilinoyl Palmitoyl Glyceride, Glycerol1-Monopalmitate      | high      | ✓        | ✓     |       | ✓    |        |
| 8762       | Ethylpentadecanoate                                        | high      | ✓        |       |       | ✓    |        |
| 8181       | Methyl Hexadecanate                                        | high      | ✓        |       |       | ✓    |        |
| 23518      | Methyl Pentadecanoate                                      | high      | ✓        | ✓     |       | ✓    |        |
| 161748     | Myricanone                                                 | high      | ✓        | ✓     | ✓     | ✓    | ✓      |
| 445354     | Retinol                                                    | high      | ✓        | ✓     | ✓     | ✓    |        |
| 445858     | 3-O-trans ferulylquinic acid                               | high      | ✓        | ✓     | ✓     | ✓    |        |
| 98455      | Stepharine                                                 | high      | ✓        | ✓     | ✓     | ✓    | ✓      |
| 5280450    | Linoleic Acid                                              | high      | ✓        |       | ✓     |      |        |
| 11005      | Myristic Acid                                              | high      | ✓        | ✓     |       | ✓    |        |
| 5281       | Stearic Acid                                               | high      | ✓        |       | ✓     |      |        |
| 222656     | Malic Acid                                                 | high      | ✓        |       | ✓     | ✓    |        |
| 938        | Nicotinic Acid                                             | high      | ✓        |       | ✓     | ✓    |        |
| 6267       | Asparagine                                                 | high      | ✓        |       | ✓     | ✓    |        |
| 470606     | Alphitolic Acid                                            | high      | ✓        |       | ✓     |      |        |
| 445638     | Palmitoleic Acid                                           | high      | ✓        | ✓     |       | ✓    |        |
| 160875     | Asimilobine                                                | high      | ✓        | ✓     | ✓     | ✓    | ✓      |
| 289        | Catechol                                                   | high      | ✓        |       | ✓     | ✓    |        |
| 5281707    | coumestrol                                                 | high      | ✓        | ✓     | ✓     | ✓    | ✓      |
| 21672700   | Colubrinic Acid                                            | high      | ✓        |       | ✓     |      |        |
| 73659      | 2 $\hat{1}$ ,3 $\hat{1}$ -Dihydroxyolean-12-En-28-Oic Acid | high      | ✓        |       | ✓     |      |        |
| 1130       | Vitamin B1                                                 | high      | ✓        | ✓     | ✓     | ✓    | ✓      |
| 5280462    | Vomifoliol                                                 | high      | ✓        | ✓     | ✓     | ✓    | ✓      |
| 6443026    | Mauritine D                                                | high      | ✓        |       |       | ✓    |        |
| 2353       | berberine                                                  | high      | ✓        | ✓     | ✓     | ✓    | ✓      |
| 101650325  | Ruvoside                                                   | high      | ✓        |       | ✓     |      | ✓      |
| 6917970    | Stepholidine                                               | high      | ✓        | ✓     | ✓     | ✓    | ✓      |
| 10146      | Nuciferine                                                 | high      | ✓        | ✓     | ✓     | ✓    | ✓      |
| 4970       | Fumarine                                                   | high      | ✓        | ✓     | ✓     | ✓    | ✓      |

|          |                                                                                                                                                                        |      |   |   |   |   |   |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---|---|---|---|---|
| 5280537  | Moupinamide                                                                                                                                                            | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5351516  | Peroxyergosterol                                                                                                                                                       | high | ✓ |   | ✓ |   |   |
| 160487   | (S)-Coclaurine                                                                                                                                                         | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 122691   | Lysicamine                                                                                                                                                             | high | ✓ | ✓ | ✓ | ✓ |   |
| 73299    | hederagenin                                                                                                                                                            | high | ✓ |   | ✓ |   |   |
| 10181133 | Cerevisterol                                                                                                                                                           | high | ✓ |   | ✓ | ✓ |   |
| 10743008 | (2R)-2-[(3S,5R,10S,13R,14R,16R,17R)-3,16-dihydroxy-4,4,10,13,14-pentamethyl-2,3,5,6,12,15,16,17-octahydro-1H-cyclopenta[a]phenanthren-17-yl]-6-methylhept-5-enoic acid | high | ✓ |   | ✓ |   |   |
| 3893     | Lauric Acid                                                                                                                                                            | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 379      | Caprylic Acid                                                                                                                                                          | high | ✓ |   | ✓ | ✓ |   |
| 125207   | Dodecanoic Acid                                                                                                                                                        | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 190      | Adenine                                                                                                                                                                | high | ✓ |   | ✓ | ✓ |   |
| 10368709 | 25-Hydroxy-3-Epidehydrotumulosic Acid                                                                                                                                  | high | ✓ |   | ✓ | ✓ | ✓ |
| 8180     | Undecanoic Acid                                                                                                                                                        | high | ✓ | ✓ | ✓ | ✓ |   |
| 91510    | Inermine                                                                                                                                                               | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5280448  | Calycosin                                                                                                                                                              | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5280863  | kaempferol                                                                                                                                                             | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 439246   | naringenin                                                                                                                                                             | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 197678   | (2S)-2-[4-hydroxy-3-(3-methylbut-2-enyl)phenyl]-8,8-dimethyl-2,3-dihydropyrano[2,3-f]chromen-4-one                                                                     | high | ✓ | ✓ | ✓ | ✓ |   |
| 10291003 | euchrenone                                                                                                                                                             | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 480784   | glyasperin B                                                                                                                                                           | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 392442   | glyasperin F                                                                                                                                                           | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 480859   | Glyasperin C                                                                                                                                                           | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5318679  | Isotrifoliol                                                                                                                                                           | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 10881804 | (E)-1-(2,4-dihydroxyphenyl)-3-(2,2-dimethylchromen-6-yl)prop-2-en-1-one                                                                                                | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 114829   | DFV                                                                                                                                                                    | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 15380912 | kanzonols W                                                                                                                                                            | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 637112   | (2S)-6-(2,4-dihydroxyphenyl)-2-(2-hydroxypropan-2-yl)-4-methoxy-2,3-dihydrofuro[3,2-g]chromen-7-one                                                                    | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5481948  | Semilicoisoflavone B                                                                                                                                                   | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5281619  | Glepidotin A                                                                                                                                                           | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 442411   | Glepidotin B                                                                                                                                                           | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 162412   | Phaseolinisoflavan                                                                                                                                                     | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5317768  | Glypallichalcone                                                                                                                                                       | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 10542808 | 8-(6-hydroxy-2-benzofuranyl)-2,2-dimethyl-5-chromenol                                                                                                                  | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5318999  | Licochalcone B                                                                                                                                                         | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 49856081 | licochalcone G                                                                                                                                                         | high | ✓ | ✓ | ✓ | ✓ |   |
| 5320083  | Glycyrol                                                                                                                                                               | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 10090416 | 3-(2,4-dihydroxyphenyl)-8-(1,1-dimethylprop-2-enyl)-7-hydroxy-5-methoxy-coumarin                                                                                       | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5319013  | Licoricone                                                                                                                                                             | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5317478  | Gancaonin A                                                                                                                                                            | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5317479  | Gancaonin B                                                                                                                                                            | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 14604077 | 3-(3,4-dihydroxyphenyl)-5,7-dihydroxy-8-(3-methylbut-2-enyl)chromone                                                                                                   | high | ✓ | ✓ | ✓ | ✓ | ✓ |

|           |                                                                                           |      |   |   |   |   |   |
|-----------|-------------------------------------------------------------------------------------------|------|---|---|---|---|---|
| 14604078  | 5,7-dihydroxy-3-(4-methoxyphenyl)-8-(3-methylbut-2-enyl)chromone                          | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 14604081  | 2-(3,4-dihydroxyphenyl)-5,7-dihydroxy-6-(3-methylbut-2-enyl)chromone                      | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 480787    | Glycyrin                                                                                  | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 503731    | Licocoumarone                                                                             | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5281789   | Licoisoflavone                                                                            | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5318869   | Jaranol                                                                                   | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5481234   | Licoisoflavone B                                                                          | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 392443    | licoisoflavanone                                                                          | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 10336244  | shinpterocarpin                                                                           | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 11267805  | (E)-3-[3,4-dihydroxy-5-(3-methylbut-2-enyl)phenyl]-1-(2,4-dihydroxyphenyl)prop-2-en-1-one | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 122851    | licopyranocoumarin                                                                        | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 195396    | 3,22-Dihydroxy-11-oxo-delta(12)-oleanene-27-alpha-methoxycarbonyl-29-oic acid             | high | ✓ |   | ✓ | ✓ | ✓ |
| 5317777   | Glyzaglabrin                                                                              | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 124052    | Glabridin                                                                                 | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 124049    | Glabranin                                                                                 | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 480774    | Glabrene                                                                                  | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 336327    | Medicarpin                                                                                | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5317652   | Glabrone                                                                                  | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 11558452  | 1,3-dihydroxy-9-methoxy-6-benzofurano[3,2-c]chromenone                                    | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 11602329  | 1,3-dihydroxy-8,9-dimethoxy-6-benzofurano[3,2-c]chromenone                                | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5317300   | Eurycarpin A                                                                              | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 23724664  | (-)Medicocarpin                                                                           | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 73205     | Sigmoidin-B                                                                               | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 928837    | (2R)-7-hydroxy-2-(4-hydroxyphenyl)chroman-4-one                                           | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 193679    | (2S)-7-hydroxy-2-(4-hydroxyphenyl)-8-(3-methylbut-2-enyl)chroman-4-one                    | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 124050    | Isoglycyrol                                                                               | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5318585   | Isolicoflavonol                                                                           | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5281654   | isorhamnetin                                                                              | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3764      | HMO                                                                                       | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 480873    | 1-Methoxyphaseollidin                                                                     | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5316900   | Quercetin der.                                                                            | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 15228662  | 3'-Hydroxy-4'-O-Methylglabridin                                                           | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5318998   | licochalcone a                                                                            | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 15228663  | 3'-Methoxyglabridin                                                                       | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 9927807   | 2-[(3R)-8,8-dimethyl-3,4-dihydro-2H-pyrano[6,5-f]chromen-3-yl]-5-methoxyphenol            | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5318437   | Inflacoumarin A                                                                           | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 101666840 | Kanzonol F                                                                                | high | ✓ | ✓ | ✓ | ✓ |   |
| 25015742  | 7,2',4'-trihydroxy - 5-methoxy-3 - arylcoumarin                                           | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5317480   | Lupiwhiteone                                                                              | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 268208    | 7-Acetoxy-2-methylisoflavone                                                              | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 177149    | Vestitol                                                                                  | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 480780    | Gancaonin G                                                                               | high | ✓ | ✓ | ✓ | ✓ | ✓ |

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|-----------|----------------------------------------------------------------------------------|------|---|---|---|---|---|
| 5481949   | Gancaonin H                                                                      | high | ✓ | ✓ | ✓ | ✓ |   |
| 15840593  | Licoagrocarpin                                                                   | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5317765   | Glycyrrhiza flavonol A                                                           | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 636883    | Licoagroisoflavone                                                               | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 13965473  | Odoratin                                                                         | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 44257530  | Phaseol                                                                          | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 14769500  | Xambioona                                                                        | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 354368    | 7-Methoxy-2-methyl isoflavone                                                    | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5280378   | formononetin                                                                     | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 323       | Coumarin                                                                         | high | ✓ |   | ✓ | ✓ |   |
| 444539    | Cinnamic Acid                                                                    | high | ✓ |   | ✓ | ✓ |   |
| 11604108  | (-)Syringaresinol                                                                | High | ✓ | ✓ | ✓ | ✓ | ✓ |
| 614467    | 5-(2-Methyl-1,3-thiazol-4-yl)thiophene-2-carboxylic acid                         | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 2794766   | 2-[4-(Trifluoromethyl)phenyl]-1,3-thiazole-4-carboxylic Acid                     | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 135567045 | 2-(4-((Pyridin-4-Yl)methyl)piperazin-1-Yl)-3,4,5,6,7,8-Hexahydroquinazolin-4-One | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 196916    | Julibrine I                                                                      | high | ✓ | ✓ | ✓ |   |   |
| 21594250  | Macharinic acid lactone                                                          | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 5281646   | Macluraxanthone                                                                  | high | ✓ | ✓ | ✓ | ✓ |   |
| 69997336  | Norarmepavine                                                                    | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 54670067  | Vitamin C                                                                        | high | ✓ |   | ✓ | ✓ |   |
| 9064      | D-Catechin                                                                       | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 12305894  | acacic acid                                                                      | high | ✓ |   | ✓ | ✓ |   |
| 6712546   | acacic acid lactone                                                              | high | ✓ |   | ✓ | ✓ |   |
| 21119850  | AP1                                                                              | high | ✓ |   |   | ✓ |   |
| 444664    | AP3                                                                              | high | ✓ | ✓ | ✓ |   |   |
| 73309     | Echinocystic acid                                                                | high | ✓ |   | ✓ |   |   |
| 725031    | 2-[(4-Methylphenyl)thio]nicotinic acid                                           | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 1453158   | Keratinocyte Differentiation Inducer                                             | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 131990    | 10-(4-Methylpiperazin-1-yl)pyrido(4,3-b)(1,4)benzothiazepine                     | high | ✓ | ✓ | ✓ | ✓ | ✓ |
| 33032     | L-glutamic acid                                                                  | high | ✓ |   | ✓ | ✓ |   |
| 5960      | l-aspartic acid                                                                  | high | ✓ |   | ✓ | ✓ |   |
| 5962      | lysine                                                                           | high | ✓ |   | ✓ | ✓ |   |
| 205       | DL-Threonine                                                                     | high | ✓ |   | ✓ | ✓ |   |
| 14729078  | sanjoinenine                                                                     | high | ✓ |   | ✓ | ✓ |   |
| 102063083 | zizyphusine                                                                      | high | ✓ | ✓ | ✓ | ✓ |   |
| 12305768  | Alphitolic Acid                                                                  | high | ✓ |   | ✓ |   |   |
| 197017    | N-Methylasimilobine                                                              | high | ✓ | ✓ | ✓ | ✓ |   |
| 23335     | Caaverine                                                                        | high | ✓ | ✓ | ✓ | ✓ |   |
| 15515703  | Jujubogenin                                                                      | high | ✓ |   | ✓ | ✓ |   |
| 3085285   | Juzirine                                                                         | high | ✓ | ✓ | ✓ | ✓ |   |
| 161388    | Virgaureagenin G                                                                 | high | ✓ |   | ✓ | ✓ |   |
| 21668841  | Onjisaponin A                                                                    | high | ✓ | ✓ | ✓ | ✓ | ✓ |