

**Dr. Duke's Phytochemical and Ethnobotanical Database****List of Chemicals for ACE-Inhibitor**

| <b>Chemical</b>                         | <b>Dosage</b>                  |
|---|--------------------------------|
| (+)-CATECHIN                            | IC50=0.155 mM/l                |
| (+)-CATECHIN                            | 0.24 mg/ml rbt (weak activity) |
| (+)-GALLOCATECHIN                       |                                |
| (+)-TETRANDRINE                         | 1 mM/                          |
| (-)-EPICATECHIN                         | IC50=0.216 mM/l                |
| (-)-EPICATECHIN                         | 0.5 mg/ml rbt (weak activity)  |
| (-)-EPICATECHIN-3-O-GALLATE             | ED50=0.08 mM/                  |
| (-)-EPIGALLOCATECHIN                    |                                |
| (-)-EPIGALLOCATECHIN-3-O-GALLATE        |                                |
| 1,3,4-TRIDEHYDROFANGCHINOLIUM-HYDROXIDE | 1.0 mM/                        |
| 1,3,5,6-TETRAHYDROXYXANTHONE            | IC50=69.2 uM/                  |
| 1,3,6,7-TETRAHYDROXYXANTHONE            | IC50=530.8 uM/ (weak activity) |
| 2,3,6,7-TETRAHYDROXYXANTHONE            | IC50=769 uM/ (weak activity)   |
| 3,4,5,6-TETRAHYDROXYXANTHONE            | IC50=238.5 uM/ (weak activity) |
| 3,4,6,7-TETRAHYDROXYXANTHONE            | IC50=35.4 uM/                  |
| 4,5-EPOXYOVATODIOLIDE                   | 20 ug/ (weak activity)         |
| AFZELIN                                 | IC50=2.8 mM                    |
| ALLO-CYMENE                             | 100 ug/ml (weak activity)      |

| Chemical  | Dosage                                     |
|---|--|
| ALPHA-DIMORPHECOLIC-ACID                            | IC50=0.6 mM/                               |
| ALPHA-TERPINENE                                     | 100 ug/ml (weak activity)                  |
| ALPHA-TERPINEOL                                     | 100 ug/ml (weak activity)                  |
| AMENTOFLAVONE                                       | IC60-90=333 ug/ml                          |
| ANCOVENIN   | IC50=85 nM rat                             |
| ANCOVENIN   | IC50=87 nM                                 |
| ANISOMELIC-ACID                                     | 20 ug (weak activity)                      |
| ASPERGILLOMARASMINE-A                               | IC50=1.2 uM/l pig                          |
| ASPERGILLOMARASMINE-B                               | IC50=1 uM/l pig                            |
| ASPEROSIDE  |  |
| ASTRAGALIN  | ID50=180 ug/ml rat (24 hr.)                |
| ATRACTYLODINOL                                      | IC50=50 uM                                 |
| CAPSIANOSIDE-A                                      | 1.15 mg/ (31.1% inhibition)                |
| CAPSIANOSIDE-C                                      |  |
| CAPSIANOSIDE-D                                      | 2.47 mg/ (32.8% inhibition)                |
| CAPSIANOSIDE-I                                      | 1.97 mg/ (weak activity, 22.1% inhibition) |
| CAPSIANOSIDES                                       |  |
| CORILAGIN   | IC50=3.7 mM/l                              |
| DL-13-HYDROXYOCTADECA-9-TRANS-11-TRANS-DIENOIC-ACID |  |
| DL-CORIOLIC-ACID                                    |  |

| Chemical   | Dosage                    |
|--|---------------------------|
| ELLAGIC-ACID                                       | IC50=5 mM/l               |
| FANGCHINOLINE                                      |                           |
| FENFANGJINE-B                                      |                           |
| FENFANGJINE-C                                      |                           |
| FENFANGJINE-D                                      |                           |
| FENFANGJINE-F                                      | 1 mM/                     |
| FENFANGJINE-G                                      | 1 mM/                     |
| FENFANGJINE-H                                      | 1 mM/                     |
| FENFANGJINE-I                                      | 1 mM/                     |
| FICUS-OLIGOPEPTIDE-FLP-1                           | IC50=13 uM/               |
| FICUS-OLIGOPEPTIDE-FLP-2                           | IC50=4.5 uM/              |
| FICUS-OLIGOPEPTIDE-FLP-3                           | IC50=14 uM/               |
| FICUS-PEPTIDE-FLP-1                                | IC50=14 uM/               |
| FICUS-PEPTIDE-FLP-2                                | IC50=5 uM/                |
| FICUS-PEPTIDE-FLP-3                                | IC50=14 uM/               |
| FISETIN  | IC50=150 uM/              |
| GALLIC-ACID  | IC50=7.7 mM/l             |
| GAMMA-L-GLUTAMYL-(+)-S-ALLYL-L-CYSTEINE-SULPHOXIDE | IC49=30 ug/ml             |
| GAMMA-TERPINENE                                    | 100 ug/ml (weak activity) |
| GERANIIN   | IC50=0.4 mM/l             |

| Chemical                                 | Dosage                                 |
|--|--|
| GLUTATHIONE                              | IC50=3.2 ug/ml                         |
| GOSSYPETIN                               | IC60-90=333 ug/ml                      |
| GOSSYPOL                                 | hmn male                               |
| ISOQUERCITRIN                            | ID50=300 ug/ml rat (24 hr.)            |
| ISOVITEXIN                               | IC50=0.28 mM/l                         |
| KAEMPFEROL-3-O-(2''-O-GALLOYL)-GLUCOSIDE | ID50=280 ug/ml rat (24 hr.)            |
| L-ARGININE                               | 500 mg/kg ivn adult hmn                |
| LIRIODENDRIN                             |  |
| LYCIUMIN-A                               | 100 ug/                                |
| LYCIUMIN-B                               | 100 ug/                                |
| MESQUITOL                                | IC60-90=333 ug/ml                      |
| MICROGININ                               | IC50=7 ug/ml                           |
| MOLIHUASIDE-A                            |  |
| MONOCROTALINE                            | 2 mg/kg rat (drinking water, 12 weeks) |
| MORIN                                    | IC60-90=333 ug/ml                      |
| MURACEIN-A                               | IC50=0.18 ug/ml                        |
| MURACEIN-B                               | IC50=145 ug/ml                         |
| MURACEIN-C                               | IC50=9.8 ug/ml                         |
| MYRCENE                                  | 100 ug/ml                              |
| N-METHYLCOCLAURINE                       |  |

| Chemical                               | Dosage                                     |
|--|--|
| NICOTIANAMINE                          | IC50=0.26 uM/                              |
| O-METHYLARMEPAVINE                     |  |
| OLEACEIN                               | IC50=26 uM/                                |
| OLEACEIN                               | IC50=36 uM/                                |
| OLEOSIDE                               | 0.33 mg/ml (weak activity, 70% inhibition) |
| OLEOSIDE-11-METHYL-ESTER               | 0.33 mg/ml (weak activity, 16% inhibition) |
| OLEUROPEIN                             | 0.33 mg/ml (weak activity, 8% inhibition)  |
| PEPSTATIN                              | IC50@ug/ml                                 |
| PHENACEIN                              | IC50=0.58 uM/                              |
| PROCYANIDIN-B-1                        | 0.33 mg/ml (58.2% inhibition)              |
| PROCYANIDIN-B-2-3,3'-DI-O-GALLATE      | ED50=2.2 uM/                               |
| PROCYANIDIN-B-3                        | 0.33 mg/ml (62.1% inhibition)              |
| PROCYANIDIN-B-3-3-O-GALLATE            |  |
| PROCYANIDIN-B-5-3,3'-DI-O-GALLATE      | ED50=1.3 uM/                               |
| PROCYANIDIN-B-6                        | 0.17 mg/ml (36.7% inhibition)              |
| PROCYANIDIN-C-1-3,3',3''-TRI-O-GALLATE | ED50=1.7 uM/                               |
| PROCYANIDIN-C-2                        | 0.17 mg/ml (43.8% inhibition)              |
| PROCYANIDINS                           | IC30-90=150-333 ug/ml                      |
| PYCNOGENOL                             | IC50=35 ug/ml hmn                          |
| PYCNOGENOL                             | 32 mg/kg ivn rat                           |

| Chemical   | Dosage                      |
|--|-----------------------------|
| QUERCETIN-3-(2''-O-GALLOYL)-GLUCOSIDE                    | ID50=300 ug/ml rat (24 hr.) |
| QUERCETIN-3-O-(2''-O-GALLOYL)-GLUCOSIDE                  | IC50=2.7 mM/l               |
| QUERCETIN-3-O-BETA-D-GLUCURONIDE                         | IC50=3.5 mM/l               |
| QUERCITRIN   | IC50=0.67 mM/               |
| RHATANIN   |                             |
| S-9-HYDROXYOCTADECA-10-TRANS-12-CIS-15-CIS-TRIENOIC-ACID | IC50=0.84 mM/               |
| SAMBACEIN-I  | IC50=28 uM/                 |
| SAMBACEIN-II   | IC50=26 uM/                 |
| SAMBACEIN-III  |                             |
| SAMBACOSIDE-A  |                             |
| SYRINGIN   |                             |
| TETRANDRINE  |                             |
| TETRANDRINE-2(N)-BETA-OXIDE                              | 1 mM/                       |
| TETRANDRINE-N-OXIDE                                      |                             |
| VICENIN-2  | IC50=0.2 mM/l               |
| VITEXIN  | 5 ug/ml                     |
| VITEXIN  | IC50=0.3 mM/l               |
| VITEXIN-2''-O-ALPHA-L-RHAMNOSIDE                         | IC50=0.28 mM/l              |
| ZINC   |                             |
| [4,6]-3,4-CIS(-)FISETINIDOL-(+)-CATECHIN                 | IC62=170 ug/ml              |

| Chemical                                    | Dosage         |
|---|----------------|
| [4,8]-3,4-CIS(-)FISSETINIDOL-(+)-CATECHIN   | IC66=330 ug/ml |
| [4,8]-3,4-TRANS(-)FISSETINIDOL-(+)-CATECHIN | IC59=330 ug/ml |