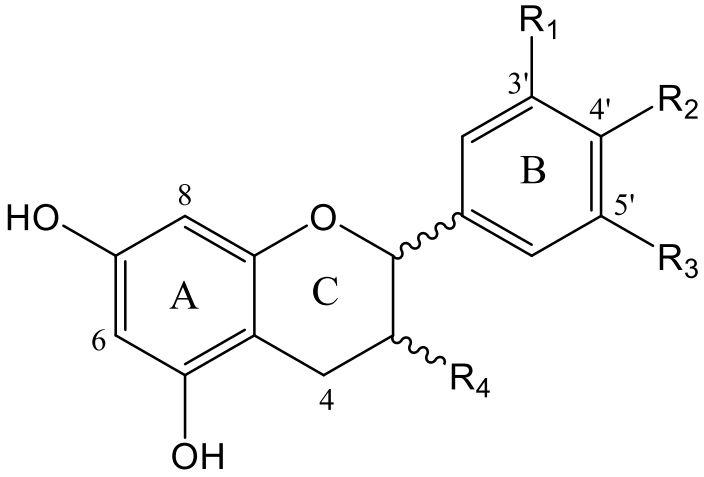
What is claimed is:

[Claim 1]. A pharmaceutical composition comprising an effective amount of proanthocyanidin, wherein the monomer units of the proanthocyanidin have the following formula:



wherein, when R_1 is OCH_3, R_2 is OH and R_3 is H, when R_1 is OH, R_2 is H and R_3 is H, when R_1 is OH, R_2 is OH and R_3 is H, or when R_1 is OH, R_2 is OH and R_3 is OH; and R_4 is 3-(α)-OH, 3-(β)-OH, 3-(α)-O-sugar or 3-(β)-O-sugar; wherein the proanthocyanidin has a degree of polymerization ranging from 55 to 60; wherein the monomer units of the proanthocyanidin are bonded to each other via C4-C8 bonding, C4-C6 bonding, or C2-C7 bonding; and a pharmaceutically acceptable carrier or salt.

[Claim 2]. The pharmaceutical composition according to claim 1, wherein the monomer units of the proanthocyanidin comprise R or S optical isomers at C2, C3 or C4.

[Claim 3]. The pharmaceutical composition according to claim 1, wherein the flavonoid compounds comprise gallocatechin, galloepicatechin or epigallocatechin.

[Claim 4]. The pharmaceutical composition according to claim 1, wherein the pharmaceutical composition comprises catechin, epicatechin, epiafzelechin, gallates, flavonols, flavandiols, leucocyanidins or procynidins.

[Claim 5]. The pharmaceutical composition according to claim 1, wherein the pharmaceutical composition comprises flavan-3-ol.

[Claim 6]. The pharmaceutical composition according to claim 1, wherein the pharmaceutically acceptable salt includes sodium salt, potassium salt, amine salt, magnesium salt, calcium salt,

zinc salt, aluminum salt, zirconium salt, dicyclohexylamine salt, methyl-D-glucosamine salt, arginine salt, lysine salt, histidine salt or glutamine salt.

[Claim 7]. The pharmaceutical composition according to any one of claims 1-6, for use in treatment or prevention of brain diseases, aging related diseases caused by the generation of active oxides.

[Claim 8]. The pharmaceutical composition according to any one of claims 1-6, for use in treating or preventing diseases including liver disease, tumor and sarcopenia.

[Claim 9]. Use of the pharmaceutical composition according to any one of claims 1-6, in the manufacture of a medicament for use in treating or preventing brain diseases, aging related diseases caused by the generation of active oxides.

[Claim 10]. Use of the pharmaceutical composition according to any one of claims 1-6, in the manufacture of a medicament for use in treating or preventing liver disease, tumor and sarcopenia.