CLAIMS

1. An organic sol-gel nano-composition containing Panax notoginseng saponins, rutin, and Ginkgo biloba effective in enhancing cerebral and cardiovascular protection, in which the composition comprise the following:

(a) solid lipid nano Ginkgo biloba: 15-30%;

(b) solid lipid nano rutin: 5-25%;

(c) solid lipid nano Panax notoginseng saponins: 0.1-10%;

(d) soy bean oil: 40-65%;

(e) lecithin: 1-10%;

(f) Tween 80: 0.1- 5%.

2. A process for preparing the composition of claim 1, comprising the following steps:

(i) preparing a carrier solution: soy bean oil is added to a reaction flask under heating at 70-100°C, preferably 80°C, and evenly stirred at 250-350 rpm, preferably 300 rpm; then lecithin is added to the reaction flask, boiled and stirred until complete dissolution; after about 30-50 minutes, preferably 45 minutes, the surfactant Tween 80 is further added to the flask, mildly boiled and evenly stirred for about 80-100 minutes, preferably 90 minutes until the carrier solution becomes transparent;

(ii) preparing a conjugated lipid nano-presuspension of three active ingredients/carriers: solid lipid nano Panax notoginseng saponins are slowly added to reaction flask, maintained at 80-90°C under fast stirring at 400-600 rpm, preferably 500 rpm, stirred and boiled until the solid lipid nano Panax notoginseng saponins are completely dissolved; solid lipid nano rutin is further added, maintained at the same temperature and stirring speed until the solid lipid nano rutin is completely dissolved, then, solid lipid nano Ginkgo biloba is added thereto while maintaining the same temperature and stirring speed until the solid lipid nano Ginkgo biloba is completely dissolved;

(iii) preparing a conjugated pre-sol-gel lipid nano-composition of three active ingredients: the carrier mixture containing three solid lipid nano components is mixed in about 3-24 hours, wherein the reaction time depends on the content of each product batch: in lab for about 3 hours, semi-industrial production for about 7 hours, and industrial production for 18-24 hours;

iv) preparing a conjugated sol-gel lipid nano-composition of three active ingredients: adjust the contents of the organic sol-gel components to achieve the standard technical parameters including the contents of Panax notoginseng saponins, rutin, and Ginkgo biloba; and

(v) obtaining a finished composition: the gel formation at gel resolution temperature comprises gelation at normal temperature (room temperature) and storage temperature (below 24°C), and gel resolution at 35-37°C (human body temperature).