The identification method of panax ginseng extract

Identify

(1)Take 0.1g sample into a test tube, add 2 ml water, forcibly vibration and spurging.
(2)Apply the product 0.1 g, add methanol 10 ml to dissolve, as a solution of the product.
Take ginseng materials 1 g, Add water 100 ml and Fried 2 hours and filter. The filtrate should through the D101 type of macroporous adsorption resin column(inside diameter 1cm,height 15cm)..Wash with water to colorless, Abandon to liquid, wash with 60% ethanol again. Collect the water liquid and dry out, Add 10 ml methanol to the residue to dissolve, as the solution of control herb.
Take ginseng saponins Rb1, ginseng saponins Rg1, ginseng saponins Re reference substance each amount, add methanol every 1 ml made each contains 2mg solution, As a reference substance solutions. According to the thin layer chromatography (appendix VI B) test，Take the above three solution each 2μl, point in the same silica gel G respectively thin plate respectively . chloroform-ethyl acetate-methanol-water (15:40:22:10), use the lower solution as the developing solvent below 10℃. Spread, remove and dry, Spray sulfuric acid 10% ethanol solution, In the heated to 105 spots show color clear, Respectively in the sunlight and uv lamp (365 nm),and view. The product chromatography, and the control herb in chromatographic and reference substance chromatographic corresponding position. Show the same color of the sun spots, UV light show the same color of the fluorescent spots.

Graph:

As high performance liquid chromatography (appendix VI D) test
Chromatographic conditions and applicability test system:
Using silica which was bond-joint with octadecyl silanes as an packing material(length25cm, inner diameter4.6mm, grain diameter 5μmLoad carbon 11%),acetonitrile as mobile phase A, with 0.1% phosphoric acid solution as mobile phase B. According to the provisions of the table of gradient elution. column temperature 30℃, flow rate is 1.3 ml per minute. measurement wavelength is 203nm. According to the theory of number plate ginseng saponins Re peak computation should not below 6000,Ginseng saponins Rd peak computation should not below 200000

Time(min)	mobile phase A(%)	mobile phase B(%)
0~30	19	81
30~35	19~24	81~76
35~60	24~40	76~60

The preparation of the referents solution

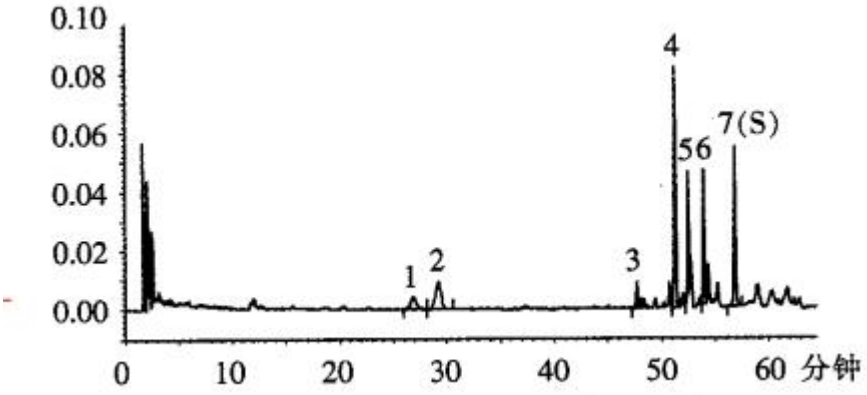
Take ginseng saponins Rg1, ginseng saponins Re, ginseng saponins Rd reference substance each amount, add methanol every 1 ml made each contains Rg1 3mg,Re 0.5mg, Rd 0.2mg solution.

The preparation of the sample solution

Apply the product 30 mg into 10ml measuring flask, add methanol ultrasound treatment to dissolve and dilution to scale,shake,and filter, get the filter liquid.

Determination method:

taken reference solution and the sample solution of each 10μl,into the high pressure liquid chromatograph, and determination.
The features of referents solution should be present 7 atlas of characteristic peak, 3 of them shall be respectively with the corresponding peak in the same time frame of reference peak reserves. The reference peak of Rd is corresponding with S peak, Calculation of 3 ~ 7 characteristic peak of relative retention time，relative retention time within the ±
5%.Rating for 0.84 (peak 3), 0.91 (peak 4), 0.93 (peak 5), 0.95 (peak 6), 1.00 (peak 7).



Peak 1: ginseng saponins Rg1
Peak 2: ginseng saponins Re
Peak 3: ginseng saponins Rf
Peak 4: ginseng saponins Rb1
Peak 5: ginseng saponins Rc
Peak 6: ginseng saponins Rb2
Peak 7(s): ginseng saponins Rd