

Extraction and purification of saponins from the roots of *Panax notoginseng* Burk.

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Summary: *The process of percolation and D101 macroporous resin adsorption/desorption was adopted to separate and purify total saponins from Panax notoginseng root. The extraction conditions were optimized with material size of 1-2 mm, ethanol 70% as a solvent, percolation rate of 2 ml/min, and ratio of solvent/material was 6. The adsorption/desorption conditions were best with the concentration of loading sample of 0.10 g/ml (based on the dried weight of raw materials), the volume of loading sample was 6 BVs (bed volume), the mobile desorption phase included water (5 BVs) and 70 % ethanol (3.5 BVs) in succession. Under the above conditions, the content of saponins in the extract was improved greatly, by up to $70.08 \pm 0.43\%$ with the recovery of $90.42 \pm 0.81\%$. This process is very simple and practical, which provides a fundamental for industrial production of total saponins from *P. notoginseng* root.*