Separation and Purification of Effective Constituents of Rhizoma Paridis Saponins by Serum Pharmacochemistry Guiding

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SUMMARY. Oral administration to rats of Rhizoma Paridis saponins (RPS) from Paris polyphylla var. yunnanensis extracts have been found to show strong anti-tumor activity, but the effective constituents were not known. To detail the effective components in RPS, we investigated the serum pharmacochemistry after oral administration of RPS and detected eight kinds of Paridis saponins in the rat serum. Then we purposefully purified a mixture (PM) from RPS to further research. By comparison of tumor weight, spleen index, antitumor rate and numbers of metastases, PM showed a considerable activity as RPS. In conclusion, the serum pharmacochemistry can help us purposefully to separate and purify RPS and to obtain a potential antitumor agent which may be better than parent drugs.

KEY WORDS: Anti-tumor effect, HPLC-MS, Paris polyphylla, Serum pharmacochemistry, Steroidal saponin.
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