

Separation of depigmenting agent from Tibet herbs

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Abstract

In this work, we screened several Tibet herbs using B16 melanoma cells and selected two herbs which down-regulated melanin synthesis effectively. *Polygonum amplexicaule* var. *sinen* and *Erigeron breviscapus*, were extracted initially with 95% methanol (w/v). *Polygonum amplexicaule* var. *sinen* and *Erigeron breviscapus* were separated using recycling HPLC with GS310 column (21.5*500mm, 10-15 μ M) into five and three fractions. One fraction of *Polygonum amplexicaule* var. *sinen* showed 44.7% melanin inhibitory at 100ppm; the other fraction of *Erigeron breviscapus* showed 27.6% melanin inhibitory, which was more efficient than the depigmenting effect of commercial agent, arbutin (17.5%) with low cell toxicity. To elucidate the depigmenting mechanism of Tibet herbs, we investigated the changes in protein level of tyrosinase, TRP-1, TRP-2 using western blotting

References

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