

## **Melanogenesis Inhibition of tyrosol and its glycoside, salidroside on in B16F0 cells**

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Melanin is responsible for skin color and melanogenesis is mainly regulated by tyrosinase taking part in the rate-limiting steps. Developing skin hypopigmenting agents are thought based on down-regulating melanin synthesis by inhibiting the activity of tyrosinase and melanin formation. Tyrosol and its glycoside, salidroside, were active components of *Rhodiola rosea*. In our previous study, we found that *Rhodiola rosea* exhibited melanogenesis inhibition. In this study, tyrosol and its glycoside, salidroside were examined for their effect on melanin synthesis and their mechanism. Tyrosol and salidroside inhibited  $\alpha$ -MSH-induced MC1R expression. The results indicated that tyrosol and salidroside could suppress the expression of tyrosinase and TRP-1. Salidroside would inhibit the activity of tyrosinase in B16 cells. Furthermore, tyrosol below 4 mM and salidroside below 0.5 mM also showed no cytotoxicity. Our results suggested that tyrosol and salidroside had potential for developing hypopigmenting agents.

Key words: melanogenesis, tyrosol, salidroside, MC1R