

中文題目：Euphol 逆向調節 TGF- β 受體分離與 TGF- β 途徑

英文題目：Euphol negatively modulates TGF- β receptor segregation inside membrane rafts and TGF- β responsiveness

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Background: Transforming growth factor- β (TGF- β) responsiveness in cultured cells can be modulated by TGF- β partitioning between lipid raft/caveolae- and clathrin-mediated endocytosis pathways. Lipid rafts are plasma membrane microdomains with an important role in cell survival signaling, and cholesterol is important for their structure and function.

Result: Euphol is an euphane-type triterpene alcohol that is structurally similar to cholesterol and has a wide range of pharmacological properties, including anti-inflammatory and anti-cancer effects.

Conclusion: In the present study, we demonstrated that euphol suppresses TGF- β signaling by inducing movement of the TGF- β receptor into lipid-raft microdomains and degradation of TGF- β receptors.