

복분자 추출물을 이용한 항스트레스 억제 물질 개발

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Development of Anti-stress Compounds Using Rubus Coreanus Extracts

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실험목적

The body's response to stress is similar no matter what the cause. The short-term reaction is the "fight-or-flight" response, consisting of activation of the sympathetic nervous system and the release of adrenaline. Longer-term stress activates the HPA axis, which causes cortisol to be released from the outer adrenal cortex. Cortisol has similar effects to adrenaline in the body, but remains in blood for a longer period of time. The regulation of cortisol level through inhibiting ACTH receptor is important meaning that treatment of a various of illness derived from chronic stress. We have screened hundreds of asian herbal extracts and performed activity-dependent fractionation of the prominent extracts, showing ACTH receptor blocking effect .

재료 및 방법

- 실험재료
 - adrenocortical cells from cow
 - Rubus Coreanus extracts
- 실험방법
 - Thin layer chromatography
 - cAMP measure using isotope labelled cAMP

결과 및 고찰

ACTH-induced cAMP generation is decreased dose-dependent Rubus Coreanus. We have observed that the inhibitory effect of Rubus Coreanus is ACTH receptor-specific activity. So, activity-dependent fractionation is performed. We have recently found a candidate effective compound. When the candidate single compound is effective on the ACTH receptor specifically, we would treat depression, stress symptoms derived from chronic stress.

Fig1. Rubus Coreanus(80% EtOH extract) Inhibit ACTH-induced cAMP release

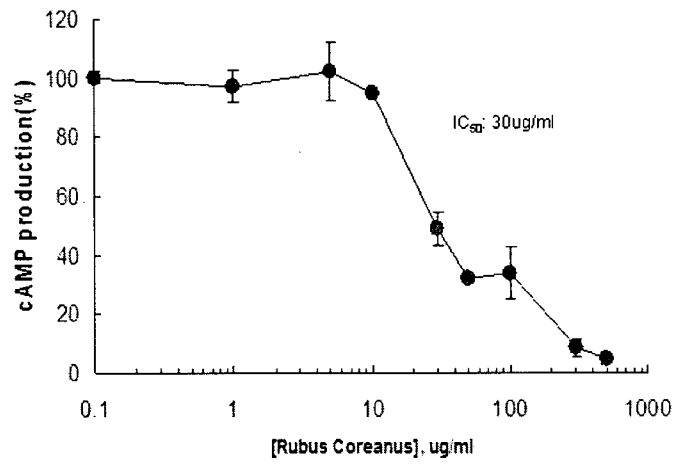


Fig2. Rubus Coreanus affect specifically ACTH receptor

