



## Therapeutic Effect and Mechanism of *Rheum officinale* Baill. on Acute Pancreatitis

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**SUMMARY.** Acute pancreatitis (AP) is initiated by digestive enzymes within pancreatic acinar cells and activates the systemic inflammatory response. Our objective was to investigate the therapeutic effect of *Rheum officinale* Baill. on acute pancreatitis. In the present study, death rate, coefficient of pancreas, serum amylase (AMY), superoxide dismutase (SOD), TNF $\alpha$  and IL-1 $\beta$ , main metabolites level were examined after induction of AP; pathology analysis were also obtained. The statistics of the present study indicated that *R. officinale* can decrease the mortality of rats with AP, attenuate pancreatic damage, slow down the variation trend of serum AMY level and pancreatic coefficients, suppress the expression of TNF $\alpha$  and IL-1 $\beta$  as well as increase the serum SOD level. These evidence demonstrated that *R. officinale* possesses the effect of prevention to pancreas pathological changes in the animal pattern.

**KEY WORDS:** Acute pancreatitis, Metabolites, Rats, *Rheum officinale* Baill., Schmidt criteria.

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