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Cytokine receptor-like factor 1 (CRLF1) promotes cardiac fibrosis via ERK1/2 signaling pathway

Key words: **Cytokine receptor-like factor 1 (CRLF1); TGF-β1/SMAD signaling pathway; ERK1/2 signaling pathway; Cardiac fibrosis; Myofibroblast transformation; Extracellular matrix (ECM)**

Research Summary

This research mainly focused on the regulatory relationship between cytokine receptor-like factor 1 (CRLF1) and cardiac fibrosis in the following aspects:

- **The change trend of CRLF1 in cardiac fibrosis**
- **What is responsible for the change of CRLF1 expression**
- **The roles and mechanisms of CRLF1 in cardiac fibrosis**

Innovation points

- **Cytokine receptor-like factor 1 (CRLF1) is up-regulated in cardiac fibrosis.**

- **Up-regulation of CRLF1 can strengthen collagen production and myofibroblast transformation by increasing the p-ERK1/2 level in the cytosol.**

- **Activation of the TGF-β1/SMAD signaling pathway in cardiac fibrosis can increase CRLF1 expression.**

Innovation points

A figure was generated to summarize the roles and mechanisms of CRLF1 in cardiac fibrosis.