Scutellarin alleviates renal ischemia-reperfusion injury by inhibiting the MAPK pathway and M1 macrophage polarization

Ge Deng¹, Bingxuan Zheng¹, Meng Dou¹, Puxun Tian^{1,*}

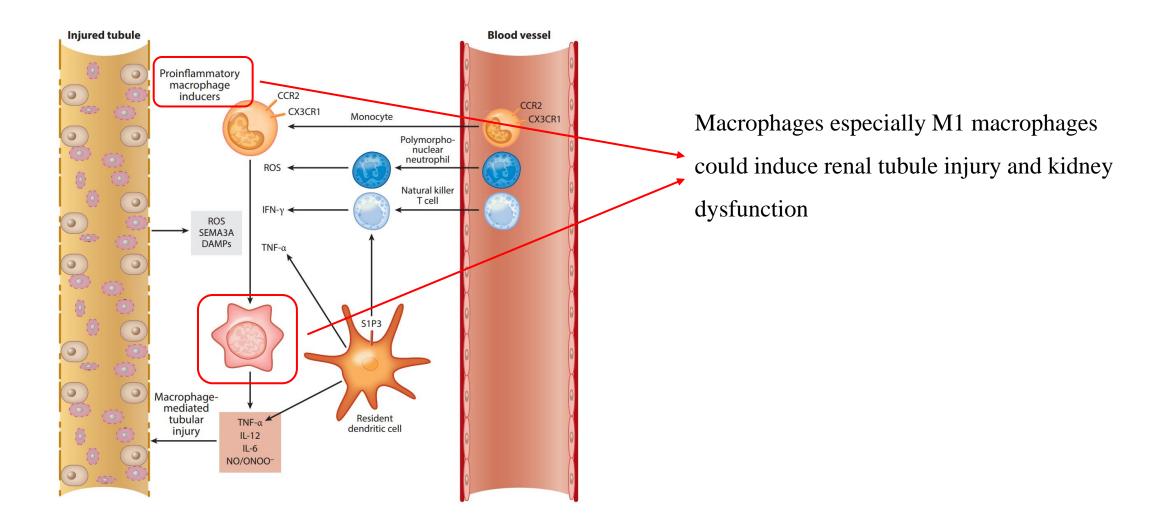
¹Department of Kidney Transplantation, Hospital of Nephropathy, The First Affiliated Hospital of Xi'an Jiaotong University, Xi'an 710061, China

I have no financial relationship with commercial interest to disclose

AND

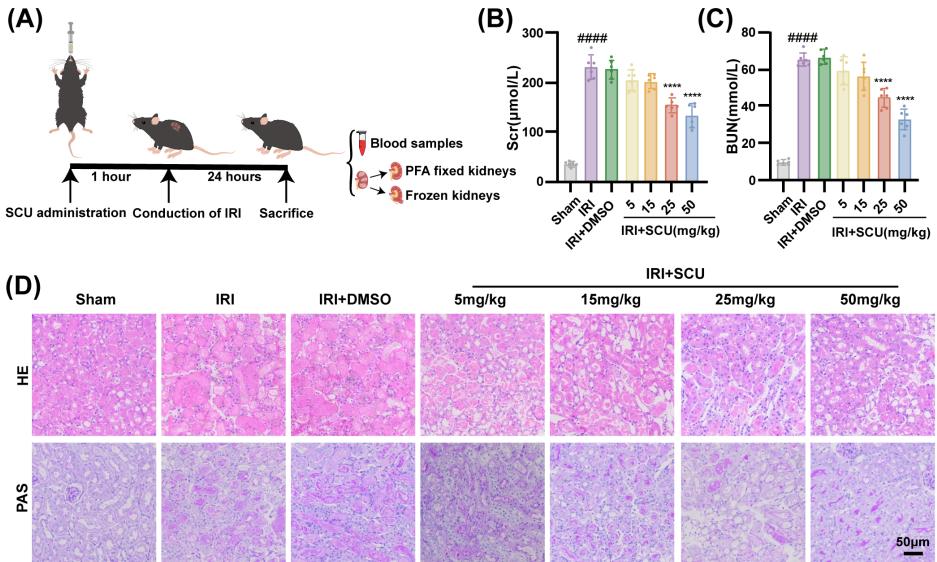
My presentation does not include discussion of off-label or investigational use.

Introduction



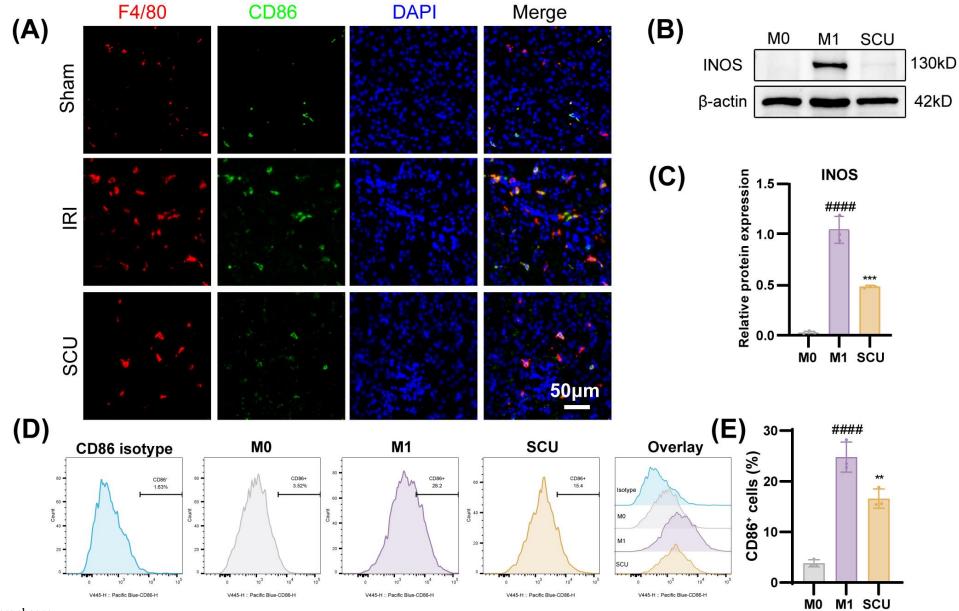
Annu Rev Physiol. 2017;79:449-469.

Results SCU administration alleviates IRI-induced kidney dysfunction



SCU, scutellarin IRI, ischemia reperfusion injury Results

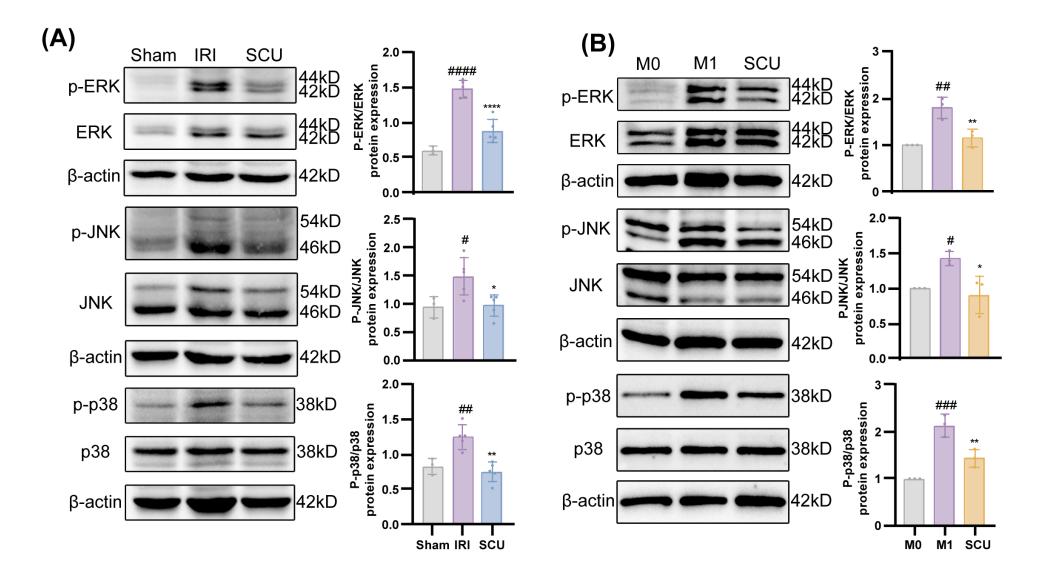
SCU inhibits M1 macrophage polarization both in vivo and in BMDMs



BMDMs, bone marrow derived macrophages

Results

The MAPK pathway is suppressed after SCU treatment



Conclusion

- SCU mitigates IRI-induced kidney dysfunction
- M1 macrophage polarization increases after IRI injury and decreases by SCU treatment
- The renoprotection of SCU is related to the phosphorylation of MAPK pathway

