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Abstract

Ethnopharmacology relevance:

Rhizome of *Ligusticum chuanxiong* Hort. (Abbreviated as *LC*) is a frequently prescribed component in plenty of traditional Chinese medicine (TCM) formulas which are used to treat diabetic nephropathy (DN). The aims of the present study are to investigate the protective effect of the ethanol extract of *LC* rhizome (EEL) against DN *in vivo*, evaluate its potential mechanism, and find the evidence supporting its enthopharmacological use as an anti-DN agent.

Materials and methods:

Hepa 1c1c7 murine hepatoma cells, human breast carcinoma MDA-MB-231 cells, human renal glomerular endothelial cells (HRGEC), and RAW 264.7 murine macrophages were adopted to test the effects of EEL and its active constituents on inhibitions of oxidative stress and inflammation *in vitro*. A streptozotocin (STZ) -induced DN C57BL/6 mice model was established and used to investigate the preventive effect of EEL against DN *in vivo*.

Results:

EEL demonstrated potential inhibitory effects against oxidative stress and inflammation *in vitro*.

[1] These two authors contributed equally.