Supporting Information

The Extract of Rhodiolae Crenulatae Radix et Rhizoma Induces the Accumulation of HIF-1α via Blocking the Degradation Pathway in Cultured Kidney Fibroblasts

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Abbreviations
Rhodiola: Rhodiolae Crenulatae Radix et Rhizoma; TCM: traditional Chinese medicine; EPO: erythropoietin; HRE: hypoxia response element; HIF: hypoxia-inducible factor; DFO: desferrioxamine
Fig. 1S HPLC fingerprint and determination of salidroside from the water extract of *Rhodiola*.

**(A):** The HPLC fingerprint was revealed at an absorbance of 275 nm that generated the highest number for peaks. The outstanding peak at ~11.5 min was corresponding to salidroside, as indicated by the arrowhead.

**(B):** The determination of salidroside by HPLC at an absorbance of 225 nm. The figure insert shows that the calibration curve of salidroside was linear ($r^2 = 0.9999$). The upper panel shows the chemical structure of salidroside.
Fig. 2S *Rhodiola* extract has no cytotoxicity on cultured HEK293T and HepG2 cells.

Cultured HEK293T and HepG2 cells were seeded onto a 96-well plate and then treated with different concentrations of *Rhodiola* extract for 24 hours. The cell proliferation was determined by MTT colorimetric assay. Data are expressed as % of increase in means ± SD with n=5, each with triplicate samples. The results showed that the treatment of *Rhodiola* extract did not change the cell number.
Fig. 3S DFO induces the accumulation of HIF-2α in HEK293T cells, but not for *Rhodiola*.

Cultured HEK293T cultures were changed with fresh serum for 3 hours before the addition of DFO (100 mM) or *Rhodiola* extract (1 mg/mL) for different times (0-6 hour). HIF-2α (~120 kDa) was revealed by western-blot. α-tubulin served as a loading control (upper panel). The lower panel shows the quantitation from the blots by a densitometer, as compared to the control. Control is DMSO at 0.2%. Values are expressed as percentage of change as compared to control cultures and as means ± SD with n=5, each with triplicate samples. * p<0.05, ** p<0.01, and *** p<0.001.

The results showed that DFO could accumulate HIF-2α, similarly to HIF-1α in HEK293T cells. In contrast, *Rhodiola* extract could decrease HIF-2α protein.