Supporting Information to:

Potent *in vitro* Inhibition of CYP3A4 and P-Glycoprotein by *Rhodiola rosea*

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HPLC determination of extracted constituents from *R. rosea*

Ethanolic extracts of *Rhodiola rosea* clones were analysed at Pharmaplan GmbH. Separation of the *Rhodiola rosea* constituents cinnamyl alcohol, rosavin (other phenylpropanoids included as rosavin were: cinnamyl-(6’-O-β-xylopyranosyl)-O-β-glucopyranoside, rosarin and rosin), salidroside and tyrosol was done by HPLC (Hewlett Packard series 1100) and quantification by UV diode array detection. All analyses were made in one run with a column temperature of 40°C under the following conditions: mobile phase acetonitrile and orthophosphoric acid run in a programmed gradient, column: Phenomenex 250 x 4.60 mm; Luna 5.0 µm C18(2) 100 Å, flow rate 1.0 mL/min, UV detection at 219 nm (salidroside and tyrosol) and 254 nm (cinnamyl alcohol, rosavins). Injection volume of sample 10 µL. Total run time 36 min. Details of an HPLC chromatogram are given in Figs. 1S and 2S.
Figure 1S: Details of the HPLC chromatogram ($\lambda_{\text{absorption}} = 219$ nm) of the extract from clone 3, showing peaks and retention times (RT) of salidroside [1] (RT = 9.6 min) and tyrosol [2] (RT = 12.3 min).
Figure 2S: Details of the HPLC chromatogram ($\lambda_{\text{absorption}} = 254$ nm) of the extract from clone 3, showing peaks and retention times (RT) of rosinarin [3] (RT = 24.0 min), rosavin [4] (RT = 24.4 min), cinnamyl-($6'$-O-\(\beta\)-xylopyranosyl)-\(O-\beta\)-glucopyranoside [5] (RT = 25.5 min), rosin [6] (RT = 26.5 min) and cinnamyl alcohol [7] (RT = 33.5 min).