

Figure S1. MSM reverses the cortisol-induced expression of SDHA and HPRT1. (A) Relative expression of *SDHA* and *HPRT* mRNA within racehorse skeletal muscle cells in response to increasing concentrations of cortisol after 24 h, with respect to 18S expression. Statistical analysis was performed using ANOVA. (B) Quantified densitometric analysis of SDHA and HPRT protein expression in racehorse skeletal muscle cells in response to increasing concentrations of cortisol after 24 h, with respect to  $\beta$ -actin expression. Statistical analysis was performed using ANOVA. (C) Relative expression of *SDHA* and *HPRT* mRNA in racehorse skeletal muscle cells in response to increasing concentrations of MSM in the presence of 20  $\mu$ g/ml cortisol after 24 h with respect to GAPDH expression. Statistical analysis was performed using ANOVA. (D) Quantified densitometric analysis of SDHA and HPRT protein expression in racehorse skeletal muscle cells in response to increasing concentrations of MSM treatment in the presence of 20  $\mu$ g/ml cortisol after 24 h, with respect to  $\beta$ -actin expression. Statistical analysis was performed using ANOVA. \* $P < 0.05$ , \*\* $P < 0.01$  and \*\*\* $P < 0.001$  vs. respective control. SDHA, succinate dehydrogenase complex subunit A; HPRT1, hypoxanthine phosphoribosyl transferase 1; RT-PCR, reverse transcription-PCR; MSM, methylsulfonylmethane.

