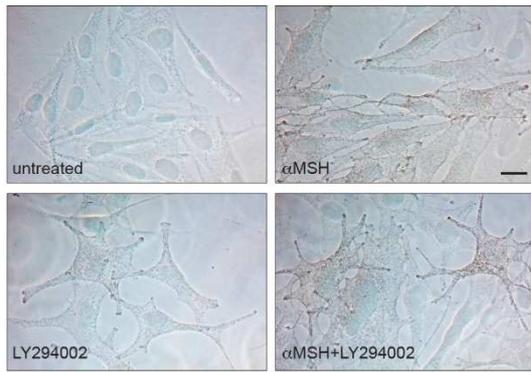
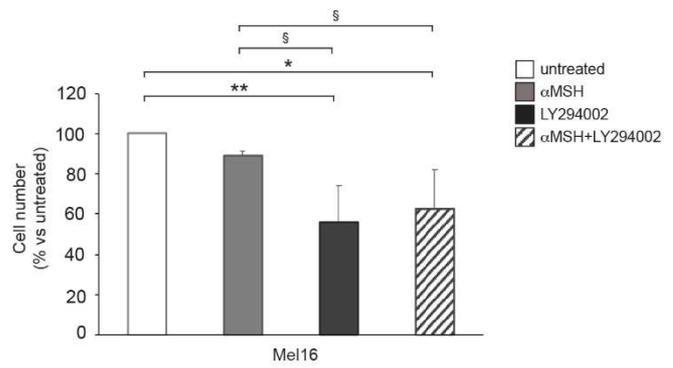
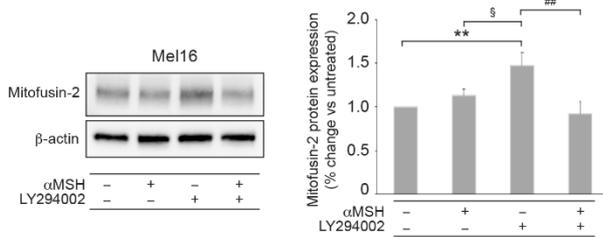


**A****B**

**Supplementary Figure S1.** The  $\alpha$ MSH-mediated PI3K/AKT pathway influences dendricity, pigmentation and cell proliferation of Mel16 melanoma cells. Phase contrast analysis (A) and cell count (B) of Mel16 cells treated with  $\alpha$ MSH in the presence or absence of LY294002 for 48 hours. Scale bar: 20  $\mu$ m. \* $p$ <0.05, \*\* $p$ <0.01 vs untreated;  $\text{\$}$  $p$ <0.05 vs  $\alpha$ MSH.



**Supplementary Figure S2.** Western blot and densitometric analysis of Mitofusin-2 expression in Mel16 cells treated with  $\alpha$ MSH, LY294002 and  $\alpha$ MSH plus LY294002 for 24 hours. \*\* $p$ <0.01 vs untreated;  $\text{\$}$  $p$ <0.05 vs  $\alpha$ MSH; ## $p$ <0.05 vs LY294002.