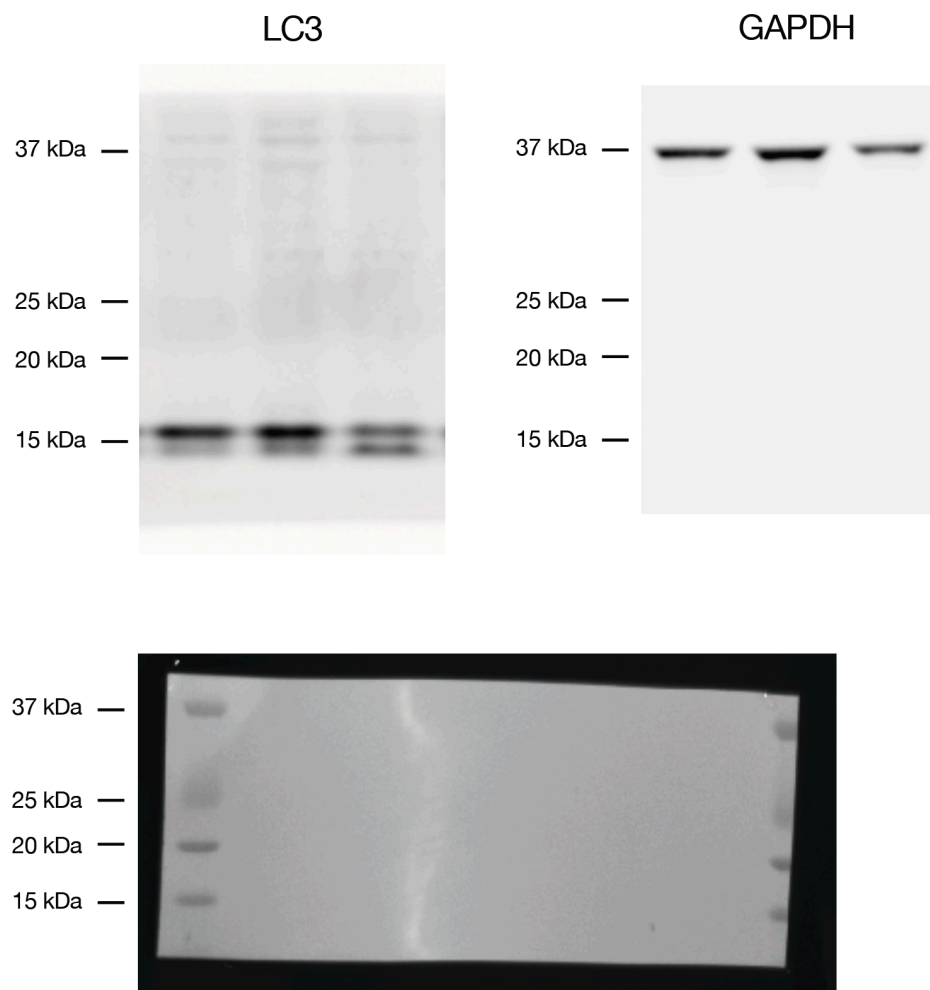
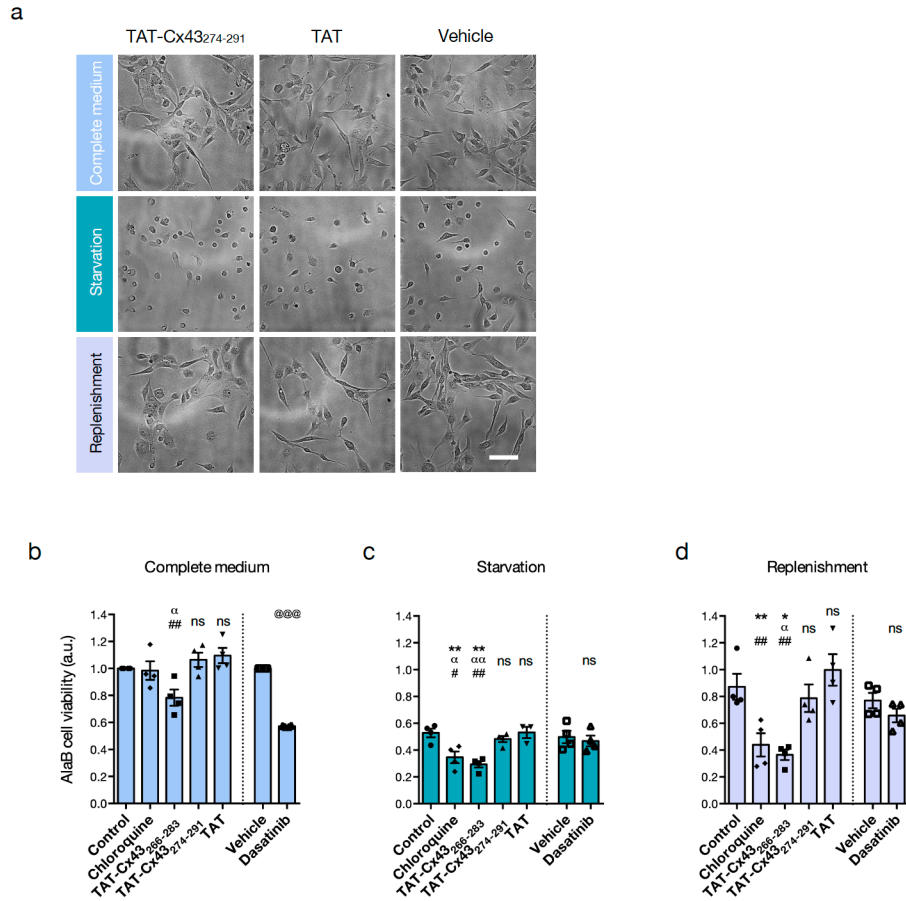


**Fig. S1**



**Figure S1.** Uncropped western of LC3 and GAPDH (Fig. 2 a). The bottom image shows the blot with molecular weight markers.



**Figure S2.** Viability of nutrient deprived dormant G166 GSCs. Related to Fig. 4. Treatment concentrations were the same as in Fig. 4 b-e: cell-penetrating peptides - 50  $\mu$ M, dasatinib - 500 nM, CQ - 50  $\mu$ M. **(a)** Representative cell culture fields imaged with an EVOS Fluid imaging station at endpoint of the indicated conditions and treatments. Scale bar: 100  $\mu$ m. **(b)** Alamar Blue assay was used to assess cell viability in the indicated conditions and treatments. All data are mean  $\pm$  s.e.m. from at least 3 independent experiments. Each data point is the average of 2 technical replicates. \* $P$  < 0.05, \*\* $P$  < 0.01 vs control;  $\alpha$  $P$  < 0.05,  $\alpha\alpha$  $P$  < 0.01 vs TAT-Cx43<sub>266-283</sub>; # $P$  < 0.05, ## $P$  < 0.01 vs TAT; @@@ $P$  < 0.001 vs vehicle; ns, not significant.

**Videos 1a-b.** Related to Fig. 4. Nutrient starvation induced dormant G166 GSCs recorded by time-lapse microscopy as described in Materials and Methods and following the scheme in Fig. 4 a. **(a)** Control G166 GSCs were cultured in starvation medium for 24 h and then maintained in the same medium following the scheme in Fig. 4 a. Recording of starvation videos began after 24h in starvation medium and lasted for 48 h. **(b)** Then, the medium was replaced with complete medium without treatment and the cells were recorded for a further 48 h.

**Videos 2a-b.** Related to Fig. 4. Nutrient starvation induced dormant G166 GSCs treated with TAT-Cx43<sub>266-283</sub> recorded by time-lapse microscopy as described in Materials and Methods and following the scheme in Fig. 4 a. **(a)** G166 GSCs were cultured in starvation medium for 24 h and then 50 $\mu$ M TAT-Cx43<sub>266-283</sub> was added to the medium. Recording of starvation videos lasted for 48 h. **(b)** Then, the medium was replaced with complete medium without treatment and the cells were recorded for a further 48 h.

**Videos 3a-b.** Related to Fig. 4. Nutrient starvation induced dormant G179 GSCs recorded by time-lapse microscopy as described in Materials and Methods and following the scheme in Fig. 4 a. **(a)** Control G179 GSCs were cultured in starvation medium for 24 h and then maintained in the same medium following the scheme in Fig. 4 a. Recording of starvation videos began after 24h in starvation medium and lasted for 48 h. **(b)** Then, the medium was replaced with complete medium without treatment and the cells were recorded for a further 48 h.

**Videos 4a-b.** Related to Fig. 4. Nutrient starvation induced dormant G179 GSCs treated with TAT-Cx43<sub>266-283</sub> recorded by time-lapse microscopy as described in Materials and Methods and following the scheme in Fig. 4 a. **(a)** G179 GSCs were cultured in starvation medium for 24 h and then 50 $\mu$ M TAT-Cx43<sub>266-283</sub> was added to the medium. Recording of starvation videos lasted for 48 h. **(b)** Then, the medium was replaced with complete medium without treatment and the cells were recorded for a further 48 h.