



Supplementary Figure S1. Synthesis of cell permeable octyl-αKG. Octyl chloroformate (97%, 49.5 g, 250 mmol) was added dropwise to a room temperature solution of αKG (36.4 g, 250 mmol) and TEA (35 mL, 250 mmol) in anhydrous CH₂Cl₂ (2000 mL). The mixture was stirred 48 h at room temperature after which time the starting material had been consumed (TLC, 10% EtOAc in hexanes). The mixture was diluted with CH₂Cl₂ (1000 mL), washed with 0.5 N HCl (2 x 1000 mL) and dried (MgSO₄). The drying agent was removed by filtration. Silica gel (~50 g) was added and the filtrate was concentrated to dryness under reduced pressure. Flash column chromatography (RediSepR_f SiO₂ (330 g), 100% hexanes→50% EtOAc in hexanes) gave the product as a clear pale yellow oil (13.6 g, 21%), which was consistent with literature characteristics by NMR and LC-MS.