Supplementary Material

Targeting Glutamine Synthesis Inhibits Stem Cell Adipogenesis *in Vitro*

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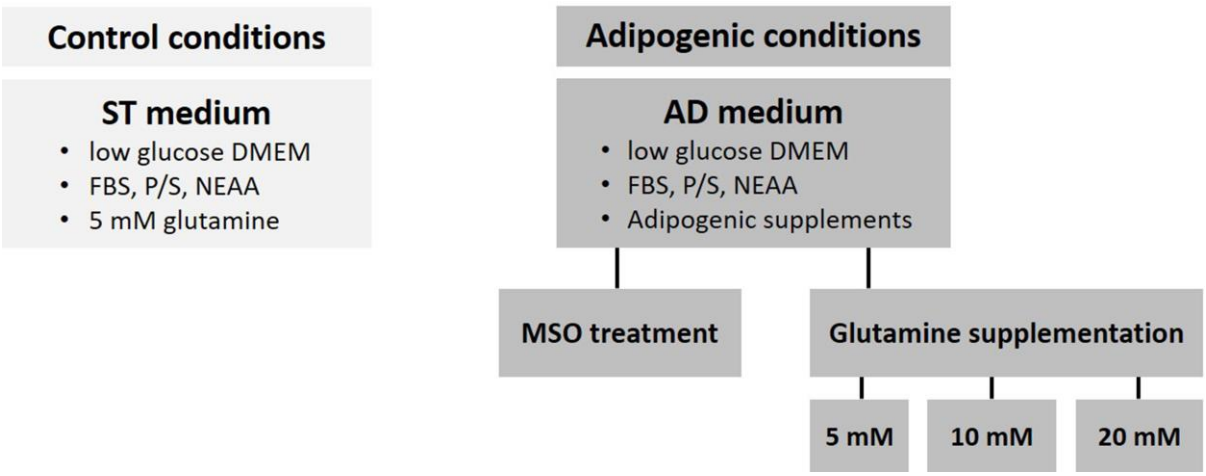
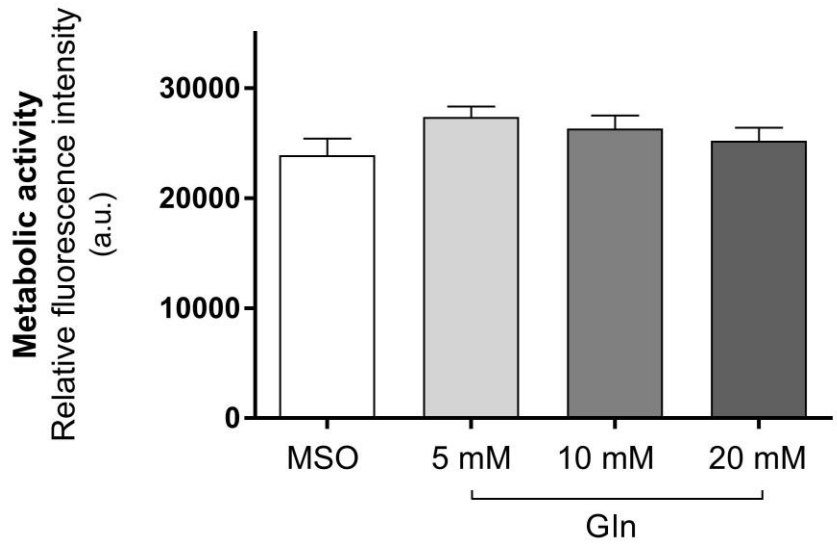


Supplementary Fig. 1. Culture medium composition for the glutamine supplementation experiment. As a control, MSCs were grown in ST medium (undifferentiated) for 7 days, while adipogenic differentiation was induced by replacing ST medium with glutamine-free AD (adipogenic) medium. One experimental group was then treated with MSO (methionine sulfoximine) to inhibit glutamine synthesis before differentiation, and another was divided into three subgroups that were differentiated with AD medium supplemented with 5 mM, 10 mM and 20 mM glutamine, respectively. DMEM: Dulbecco's modified Eagle's medium; FBS: fetal bovine serum; P/S: penicillin/streptomycin; NEAA: non-essential amino acids.



Supplementary Fig. 2. Cell viability measured in mMSCs after 7 days of treatment. Data are analysed using one-way ANOVA, followed by Tukey's post-hoc test and are shown as mean ± SEM. Statistical significance was set at $p < 0.05$, $n = 3$. Gln: glutamine.