

**Figure S1** Effect of 3UP8i treatment on splicing of *SMN2* in vivo. **(a)** Splicing of endogenous *SMN2* exon 7 in liver. Various ASOs were administrated through IP injection at 10, 20, and 40 μg/g body weight, daily for three days. Tissues were harvested for analysis 24 hours after the third injection. **(b)** Splicing of endogenous *SMN2* exon 7 following IP administration. Animals received injections daily for three days. Tissues were harvested for analysis 24 hours after the third injection. **(c)** Splicing of endogenous *SMN2* exon 7 following ICV administration. Animals received injections daily for three days. Tissues were harvested for analysis 24 hours after the third injections daily for three days. Tissues were harvested for analysis 24 hours after the third injection.