



**ESM Fig 1. Systemic administration of AAV8 vectors with murine insulin promoters restricts transgene expression to pancreas.**

**a.** Schematic representation of AAV vectors with Cytomegalovirus (CMV) promoter & mouse insulin 2 gene (mIP2) promoter constructs with firefly luciferase transgenes. **b.** At 14 days after vector administration through IP, *in vivo* AAV8 mIP2-mediated luciferase expression was monitored by the IVIS live-imaging system. CMV-driven luciferase luminescence was found throughout the intraperitoneal cavity, whereas both insulin promoters restricted expression to the pancreas.