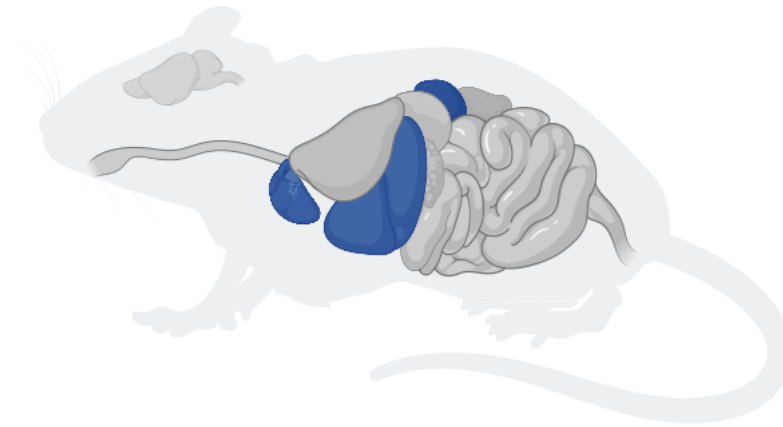


## Supplemental Table 1



Tissues colored blue exhibit high-confidence expression of OSK.

Tissues expressing GOI by AAV9 with relevant design	Promoter used	Paper
Liver	EF1a	Chandler et al, Hum Mol Genet, 2017 Inagaki et al, Mol Therapy, 2006
	UBC-rtTA4; TRE-OSK	Lu et al, Nature, 2020
	EF1a-rtTA4; TRE-OSK	This paper
Heart	EF1a	Inagaki et al, 2006
	EF1a-rtTA4; TRE-OSK	This paper
Spleen	CMV-OSK	This paper
Pancreas	UBC-rtTA4; TRE-OSK	Lu et al, Nature, 2020
Brain*	EF1a	Inagaki et al, 2006 Chandler et al, 2017, Hum Mol Genet
	EF1a-rtTA4; TRE-OSK (*not expressed due to the low co-transduction efficiency to the brain)	This paper