

**Supplemental Table S1.** All CRISPR sequences used for low-throughput experiments are given as well as the gene they map to.

sgRNA	ID	type
ACACCACCATGGATAAGCGG	NXT1-1	KO
CAATGTCTACTACACCACCA	NXT1-2	KO
TCTGCAGGCCTGATCCACAT	NXT1-3	KO
GGGCTGGATCAAAGTAACGA	NXT1-intron	Intron
AACGGCGGATTGACCGTAAT	LACZ	non-targeting
AAGAATCTCATCCTGAACAA	POLR1C	KO
GGTGTGCGTATGAAGCAGTG	Chr2-2	cutting control
GGCCTTGTCCAGATACAGCC	NXT2	KO