

**ESM Table 1. Genotyping and qPCR primers (5' - 3').** Ubc Cre, LepR loxP/loxP, Rosa26 YFP, and Rosa26 confetti primers were used to genotype mice. InsR primers were used as a control gene for qPCR with LepR loxP/loxP primers

Gene	Forward	Reverse	
Ubc Cre	CGCTCGGGTTGGCGAGTGTGTTTTGTGAA	GCCTGGCGATCCCTGAACATGTCCATCAGG	
LepR loxP/loxP	GTTGTTTGAAGCTACAAGGCTGTATG	GTACAGGTCTCTTTGCTAAACCTGAAG	
InsR	TCCACTTTAGAGTAACAGACTGAGGTT	AAGTTAAGAGGGGAATGTGTGGAATAC	
Gene	Common	Wild Type	Mutant
Rosa26 YFP	AAAGTCGCTCTGAGTTGTTAT	GGAGCGGGAGAAATGGATATG	AAGACCGGAAGAGTTTGTC
Rosa26 Confetti	CCAGATGACTACCTATCCTC	AAAGTCGCTCTGAGTTGTTAT	GAATTAATCCGGTAACTTCG